

# DIGITAL TECHNOLOGIES AND EMERGING MEDIA (DTEM)

## DTEM 1401. Introduction to Digital Technologies and Emerging Media. (4 Credits)

(Formerly COMM 2500): A comprehensive overview of the possibilities of communication in a digital world. Through a series of readings, lectures and assignments, students will study the history and forms of new media, address issues of media control, convergence and convertibility, and begin to explore the cognitive and cultural implications of living in a digital age. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CMST, COMC, NMDD, NMML.

## DTEM 1402. Digital Cultures. (4 Credits)

This course will examine the interplay between digital environments and the culture(s) they both stem from and shape. It will give special attention to the ways digital and networked spaces relate to lived experiences on- and offline, organize social relationships, shape values and norms, engage individuals in participatory modes of cultural production, and impact culture on an individual, group, and trans-national scale. Students will investigate the culture(s) (social norms, language, practices of inclusion and exclusion, etc.) of individual digital platforms and learn about cultural norms that span the digital world more broadly. We will also critically engage with whether and how those qualities might also impact the offline experience of various communities or groups, such as those based on race, gender, class, abilities, or affiliation with various subcultures or values. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** ACUP, AMST, APPI, CCUS, CMST, COMC.

**Prerequisites:** DTEM 1401 or COMM 2500.

## DTEM 1999. Tutorial. (1 Credit)

Independent research and readings with supervision from a faculty member.

## DTEM 2411. Digital Research Methods. (4 Credits)

(Formerly COMM 4710): Digital technologies affect every area of social life, from personal identity, to interaction with others, to broad social and political arenas. Digital technologies have also deeply impacted scholarship and research in the humanities and the social sciences. How can we investigate the impacts of digital technologies accurately? How do academics and industry professionals use social media, "big data," and the like to answer puzzling questions? This course provides an overview of and hands-on approach to contemporary digital research methods, including ethnography, interviews, focus groups, metrics and analytics, and polling and surveys. Students will become familiar with basic research methods used in both academic and professional contexts. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CCUS, CMST, DTMM, JOUR, JSME, NMDD.

## DTEM 2412. Digital Ethnography. (4 Credits)

Ethnography, or the systematic description of human culture, has expanded beyond its anthropological origins and is widely used by researchers and industry professionals alike to understand online interaction. This class explores how ethnographic methods, such as participatory observation, field notes, and interviews, can be used to examine and analyze popular internet culture, self-expression, relationships, social practices, and emerging technological forms. Students will learn the basics of digital ethnography, and be able to competently leverage cultural analysis to understand digital artifacts. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** DTMM, LING.

## DTEM 2413. Participatory Methods. (4 Credits)

This course spans both the use of participatory methods to research digital technology, as well as the use of digital technology to facilitate participatory research. Participatory, collaborative, and community-based research models aim to engage traditional research subjects as active participants in the production of knowledge. Drawing from these models, students will critically explore how emerging civic and social media produces knowledge and how to utilize such media for social research. Collaborative workshops and projects are designed to engage students in negotiating the power dynamics of various research relationships. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attribute:** DTMM.

## DTEM 2414. Media Ecology. (4 Credits)

Analysis of the impact of innovations on communication, culture, and consciousness. As the study of media as environments, media ecology is concerned with the nature and effects of our codes and modes of communication, and the technologies and techniques we employ. Through an understanding of the role that media play in historical patterns of change, we can assess the influence of the contemporary media environment on individuals and society, and better plan and prepare for the future. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** ACUP, AMST, ASAM, CMST, COMC, DTMM.

## DTEM 2417. Data Visualization. (4 Credits)

Obtaining, interpreting, visualizing and displaying data are essential skills for communication professionals in the 21st Century. This hands-on introductory course in data visualization will help students learn to use data to tell visual stories. Topics discussed will range from where to find data and how to evaluate sources to how to organize data to create visually appealing graphics that tell stories that can be grasped in an instant. Students will critique published visualizations to identify common pitfalls, as they create a data-based story to add to their portfolio. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** DTMM, JOUR, NMAT, NMDD, NMML.

**DTEM 2421. Digital Production for New Media. (4 Credits)**

This course focuses on analysis and practice of visual design concepts as they apply to a wide range of digital software programs. The course generally covers photo editing, audio editing, video editing, desktop publishing, and basic website design. Classes are structured around individual production assignments with a focus on project management, composition, and layout. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** JDPR, JOUR, NMAC, NMAT, NMDD, NMMI.

**DTEM 2425. Digital Video Production I for DTEM. (4 Credits)**

(Formerly COMM 2222) This introductory workshop class will teach the fundamentals of digital video production and cinematic storytelling. Students will learn concepts, techniques, and technologies pertaining to digital video and sound through hands-on production and post-production assignments. We will explore the aesthetics and the communicative potential of the medium through screenings, critiques, and exercises. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** FIPR, FITV, JDPR, JOUR, NMDD, NMMI.

**Mutually Exclusive:** FITV 2425.

**DTEM 2427. Digital Audio Production. (4 Credits)**

(Formerly COMM 2303): A comprehensive introduction to the principles and techniques of audio production. Instructions in the use of portable audio equipment as well as in production and post-production skills. A hands-on approach augmented with readings and listening to audio material. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attribute:** JOUR.

**DTEM 2431. Topics in Digital Production. (4 Credits)**

An examination of radio and television from cultural, aesthetic and historical perspectives. Topics covered include the development of broadcast programming, the sources of radio/television forms in other media and the impact of electronic media on the arts today. The course considers how broadcasting has affected contemporary culture and emerged as the most prominent maker of popular images. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**DTEM 2443. Fashion and Digital Media. (4 Credits)**

This course examines what happens when one of the oldest forms of communication, fashion, meets up with the newest, digital media. Digital media has reconfigured the fashion industry: bloggers sit alongside famous magazine editors at Fashion Shows, the retail industry collapses as online shopping takes off, platforms such as Instagram reconfigure social status and power. While digital media creates new jobs, communities, celebrities, status and power in the fashion world, it also maintains and creates new social inequalities. We will examine the relationship between fashion and digital media from three vantage points: globally, locally, and personally. Our global focus considers the ways digital media creates new networks of production/labor/people; the local unit considers new jobs and identities (such as "influencers") in the fashion industry, with special focus on New York City; and our focus on the personal. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CMST, FASH.

**DTEM 2450. Digital Property: Rights, Policies, and Practice. (4 Credits)**

This course will provide a general overview of copyright law specific to its impact on media and entertainment institutions, online platforms, and distribution channels. The course will examine copyright subject matter, ownership, duration, rights, licensing, infringement, and fair uses with a focus, in particular, on issue-identification and other analytical skills for professionals in practice. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CELP, CMST, COMC, DTPL, NMAC, NMDD, NMMI.

**DTEM 2452. Game Culture: Theory & Practice. (4 Credits)**

Games are everywhere and over 155 million Americans play them regularly on tabletops and electronic devices across the county. Their prevalence has prompted the medium as a space for expression, art, and meaning-making. Moving beyond the notion of simple entertainment games are creating provocative experiences to promote change or understanding. This course emphasizes exploration and critical thinking as we discover how games are designed to address issues such as social justice, gender representation, behavioral change, and education. Through analyzing game artifacts and engaging in creative exercises, students will be able to think critically about games and how they are designed. Students will apply this literacy into their own game projects. This course is open to anyone who is interested in games and their possibilities. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** AMST, ASAM, NMAT, NMDD.

**DTEM 2453. Introduction to Game Narrative. (4 Credits)**

The rise of interactive experiences has coincided with the exponential growth of the video game industry over the past two decades. There has been an increasing crossover between games and other forms of entertainment media, as well as games connected to areas such as mental health, social justice, and education. An understanding of game mechanics has become fundamental to operating in the digital media landscape. At the same time, we have very recently entered a storytelling moment, and the creation of novel storytelling strategies for games has become a key component of the development process. The practice of game narratives is a new aspect of writing for digital media, one that helps to bridge storytelling formats from television and film with interactive experiences on our computers or phones. This course introduces students to the design of narrative games, including narrative and game-design strategies. There will be a balance of story and game development as students create their own worlds filled with characters, history, and opportunity. This course is open to anyone who has an interest in games as storytelling mediums! Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** NMAT, NMDD.

**DTEM 2459. Social History of Communication and Technology. (4 Credits)**

(Formerly COMM 2010): Explores theoretical and critical perspectives on technology, with special emphasis on the impact of technology on communication, culture and consciousness; the symbolic component of technology; the ecology of media; the process of technological innovation and the diffusion of innovations; the role of media and culture in the creation of a technical society. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CCMS, COMC, LING, SSCI.

**DTEM 2471. Writing for Online Media. (4 Credits)**

From Web sites to Web logs, wikis to social media, the Internet continues to evolve and offer opportunities for communicators in various fields. Students will create their own blog; learn about cyber-journalism; apply their writing skills toward business, politics, art, or personal expression; and explore how marketing, public relations, Web design, and other factors impact writing style in New Media. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** JOUR, NMDD, NMMI.

**DTEM 2999. Tutorial. (2 Credits)**

Independent research and readings with supervision from a faculty member.

**DTEM 3423. Projects in Digital Video. (4 Credits)**

Students will explore the possibilities of digital video and evolve both conceptually and technically through critiques, tutorials, readings, discussion and practice. Students will be challenged to discover and shape concepts of interest, experiment, explore narratives, plan and execute, while developing strategies for effective communication through moving image and sound. Resulting work can be delivered as video for the screen, installation or performance. Students are challenged to find appropriate outlets for their works (such as festival, public space, broadcast, screening, gallery, etc.) This course is at the intermediate level. Students should enter with working knowledge of Final Cut Pro X or another similar video editing software garnered through a previous course in digital video or permission of instructor. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** FIPR, NMAT, NMDD, NMMI.

**Prerequisites:** COMM 2082 or COMM 2222 or COMM 2522 or COMM 2523 or DTEM 2425 or FITV 2425 or JOUR 1701 or VART 1265.

**DTEM 3425. Digital Video Production II. (4 Credits)**

Students will devote the semester to developing a narrative or documentary project of their choosing from concept to post-production. This workshop will allow students to evolve technically and conceptually through screenings, critiques, tutorials, readings, and practice. This is an intermediate class, and students must have taken some sort of introductory film/video production class prior to enrolling, and have some basic familiarity with DV cameras and editing software. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** FIPR, FITV, NMDD, NMMI.

**Prerequisites:** DTEM 2425 or FITV 2425 or FITV 3512 or VART 1265 or VART 3261 or VART 3262 or COMM 3525.

**DTEM 3444. Nerds, Geeks, and Bros.. (4 Credits)**

This course looks at the rise of the 'nerd' as a way to investigate shifts in masculinity, race, and power with the rise of the digital economy. Part of the course investigates how men, starting in the 1960s to the "Brotopia" of Silicon Valley today, dominate digital technologies and the STEM field. We will examine the historical and cultural shifts that changed computer work from a feminine job to a masculine one. From examinations of popular culture, such as movies, students will trace how the nerd figure became a new hero. The nerd hero is overwhelmingly male and white and represents shifts in gender and racial politics. Students will read from history, social science, communications, as well as study popular media such as movies, television, and advertisements. Through an investigation into the nerd, geek, and bro figures, students will see how women and minorities innovations have been left out of history, as well as left out of the industry. By the end of the course, students will advance potential solutions to the inequalities in the technology industry.

**Attribute:** DTEV.

**DTEM 3447. Race, Gender, and Digital Media. (4 Credits)**

Technologies—especially digital media—are often described as creating a more diverse global community. But the reality is that forms of difference, notably race and gender, are very much a part of our digitally mediated lives. This course will focus on how technologies have, at times, reproduced, ignored, helped, and hindered representations of and opportunities for power offered to people of different races and genders. In this course, students will be expected to identify, observe, understand, and analyze issues of race, gender, ability, and class present in "new" media. Topics will include historical accounts, contemporary industry practices that often exclude people of color (particularly women of color), identify, and representation online. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** ACUP, ADVD, AMST, ASAM, ASSC, CCUS, COMC, DTEV, JOUR, LALS, LASS, PJRC, PJST, PLUR, WGSS.

**DTEM 3452. Game Design Projects. (4 Credits)**

This course is an applied production-oriented class that focuses on providing students the expertise needed to work on a design team to develop their own game projects. At the conclusion of the course, students will complete a playable game prototype for release online or showcased elsewhere. Games will address issues such as social justice, gender representation, behavioral change, or education, and will be developed using RPG Maker MV. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** NMAT, NMDD.

**Prerequisite:** DTEM 2452.

**DTEM 3463. Civic Media. (4 Credits)**

Participating in local life can be difficult. Information is hard to obtain and validate, local meetings are difficult to attend, networks are challenging to build. Increasingly, governments, advocacy groups, community organizers, and individual citizens are looking to digital tools to increase and improve the conditions in which we live and enhance our opportunities to engage. We will look at academic research surrounding citizenship and engagement in a digital era and cover research into many genres of civic media, from citizen journalism to hackathons, tech for development, activist art hacker culture, and games for good. This class will not only explore the various goals campaigns are using digital tools to meet, but will also focus on what type of citizen these tools are enabling and encouraging people to become. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CMST, COMC, DTEV, JOUR, NMDD, NMMI.

**DTEM 3475. Digital Media and Advocacy. (4 Credits)**

This course will teach students the history of using digital media for advocacy, its contemporary implications for political participation and social movements. It is grounded in theories of technology for development, social movement theory, and participatory citizenship. It also involves a practical element, and teaches students and puts those to use in practically applied lessons concerning how to use digital media to impact political participation (in terms of protesting, donating, civic engagement, voting, and more. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CCMS, CMST, JOUR, NMAC, NMDD, NMDE, NMMI, PJSJ, PJST, PPWD.

**DTEM 3476. Social Media. (4 Credits)**

(Formerly COMM 3307): This class critically examines popular computer-mediated communication technologies such as Facebook, Twitter, and YouTube. Students will critically analyze, use, and encounter a broad range of social technologies. Students will also learn basic social media skills, “best practices,” and create and propagate content. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** ACUP, AMST, ASAM, ASSC, CMST, JOUR, JSME, NMAC, NMAT, NMDD, NMMI.

**Mutually Exclusive:** JOUR 3776.

**DTEM 3500. Resistance and Global Activism. (4 Credits)**

This course studies the proliferation, and implications, of digital technology in political resistance. The goal is to provide students with analytical tools and skills for understanding the strengths and weaknesses of contemporary digital resistance. The course’s perspective is on the resistance played out in the “everyday life” of “ordinary” people: a resistance that might be widespread and diffused, individual or small scale, implicitly political, disguised, or even hidden. It brings to light how the “private” or “personal” can be political and explores the creativity of “cultural resistance.” Particular interest will be paid to studying new sources of power and their ability to subvert or censor acts of digital resistance. By taking this course, the participants will gain a sophisticated understanding of the role played by technology, and technology providers, in the performance of and resistance to power. Course participants will develop a critical understanding of the nature of technology and its implications for local, regional, and global justice. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CCMS, CCUS, CELP, CMST, COMC, DTEV, NMDE.

**DTEM 3999. Tutorial. (3 Credits)**

Independent research and readings with supervision from a faculty member.

**DTEM 4418. Critical Making. (4 Credits)**

Critical making is about engaging in hands-on hardware design as a form of reflection and analysis. In a world where computing is becoming more embodied, ubiquitous, and sensing, critical making as a practice focuses on the material layer of digital technologies, turning from software to hardware and the physicality of computation and communications infrastructure. In this class, we will construct and deconstruct physical hardware objects using a range of approaches, such as electronics fabrication and hardware hacking. No prior coding or engineering experience is required. Students will engage in a large proof-of-concept project. Whether it’s in marketing, teaching, designing, or coding, the likelihood is that you will need to understand this emerging world of intelligent objects, interconnected spaces, and making as a culture. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** NMAT, NMDD, NMDE, NMMI.



**DTEM 4430. Digital Media Ethics. (4 Credits)**

This course provides a comprehensive overview of the current ethical and social implications of our data-driven society. We start by learning some of the fundamental principles of ethics and technology, and then explore the ethical responsibilities of being a data/information professional. We then look at ethical and social issues that emerge throughout the data lifecycle, including how data is collected, stored, shared, and analyzed. Finally, we will engage more deeply with the ethical and social dimensions of various data-rich contexts, including law enforcement, education, health care, and the workplace. Digital Media Ethics explores classical and contemporary approaches to ethical decision-making and applies them to modern media practices. We will examine key ethical issues confronting new media today. In addition to a basic introduction to ethics, the course will examine thorny issues that have emerged as a result of new media formats like the internet. Key concepts include digital inclusion and representation, digital lifestyles, automation and simulation, free speech and content moderation, law enforcement and digital conflict, information privacy and security, and artificial intelligence and algorithmic biases. The main objective is to inform and encourage the critical examination—and responsible development and use—of computing technologies. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CCUS, CELP, DTEV, JPLH.

**DTEM 4440. Privacy and Surveillance. (4 Credits)**

New technologies, from closed-circuit television cameras to large databases, have shifted the information landscape in ways that call into question cultural assumptions and social norms about sharing, visibility, and the very essence of privacy. Can we have privacy in the digital age? Is mass surveillance justified? Whose interests are being served, and who is at risk? This course is designed to promote student awareness of and sensitivity to the ethics, values, and latest developments in global privacy and surveillance. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** ACUP, AMST, APPI, ASAM, ASHS, CELP, DTPL, NMAC, NMAT, NMDD, NMDE, NMMI.

**DTEM 4451. The Technology Industries. (4 Credits)**

From 2-person startups to multinational corporations, technology companies exert an enormous influence on contemporary society, industry, and politics. This course critically examines various aspects of the technology industries, such as engineering culture, entrepreneurship, the history and culture of Silicon Valley, and the influence of technology companies on policymaking and localism. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attribute:** DTPL.

**DTEM 4470. Values in Design. (4 Credits)**

This course focuses on the role values play in the design and development of technologies. Students will gain hands-on experience with several design approaches and methodologies such as value sensitive design, values in design, and values-led participatory design. Course readings, discussions, and activities will be organized into a design project that posits a technological experience centered on a particular value set and using a value-oriented design approach. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CELP, DTEV, NMAT, NMDD, NMDE.

**DTEM 4480. Digital Media and Public Responsibility. (4 Credits)**

An examination of the public cultures, goods, and problems that emerge from the ongoing integration of digital media into everyday life. This course goes beyond a traditional focus on personal problems and responsibilities to explore how publics have and can take collective responsibility to address structural inequities in a digital society. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** ACUP, AMST, APPI, ASAM, ASHS, CELP, DTEV, EP4, JETH, JOUR, NMDD, NMDE, PJMJ, PJST, VAL.

**DTEM 4488. Political Communication in the Digital Era. (4 Credits)**

This course will focus upon the construction of campaign communication through the lens of two fundamental messaging phases: (1) the development of campaign messages through initial research, polling and strategy; and (2) the dissemination, circulation, and sometimes adjustments of those messages through use of paid and earned media. In doing so, we will focus on both digital and traditional/mass media channels, and on messaging within a variety of contexts, including crisis communication, going negative, get out the vote (GOTV), and more. In doing so we will seek answers to a variety of questions: What exactly is effective political communication, particularly in the context of campaigns? How do campaigns create messages that not only persuade citizens of a candidate's worth, but move citizens to vote or not? How do these messages find their way into various channels of communication? How can the use of many disparate channels – of different technologies, tactics and skills – best reflect a coherent campaign strategy? And how do all of these efforts comport with our traditional notions of democracy, and/or point to new ideals? To get at these questions, research concerning the efficacy of messages, the process of their construction, and democratic values implied by their content will be the focus of this course. These empirical measurements of the state of campaign messaging and its theoretical implications will be supplemented by periodic advice from practitioners of political communication about the practical application of such research from professionals in the field. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

**Attributes:** CCMS, CMST, JOUR.

**DTEM 4999. Tutorial. (4 Credits)**

Independent research and readings with supervision from a faculty member.