Recommended Courses: Fall 2016

Note: This list of Recommended Courses offered at UC Berkeley is based upon available information and is not intended to be comprehensive. To suggest changes or additions, please contact:

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Graduate courses: pages 1-2
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Graduate courses:

**NWMEDIA 201, 3 units**  
Questioning New Media  
Jill Miller

Held in conjunction with the Art, Technology, and Culture Colloquium which brings internationally-known speakers to campus to present their work on advanced topics in new media: http://atc.berkeley.edu. Students will enhance skills in questioning new media: how to think critically about new media, how to use new media resources to research pioneering work in new media, how to form incisive questions about new media, and how to evaluate and create effective presentations on topics in new media.

**NWMEDIA 290-001, 4 units**  
(also NWMEDIA 190-002, also THEATER 266-001)  
Making Sense of Cultural Data: Combining Humanities and Machine Learning Approaches to Analyze News, Film, Television, and Social Media  
A. De Kosnik

"Making Sense of Cultural Data" is a seminar open to undergraduates and graduate students in Fall 2016 (undergraduates will have to apply to the seminar by submitting a 1-page, single-spaced application stating their reasons for wanting to take the course and any background they have in data science or digital humanities).

This course will invite up to 15 upper-division undergraduates and 15 graduate students to form small (three- to five-person) research teams that formulate humanities-based research questions that they will answer by analyzing large news service databases, films and television series, and the social media platform Twitter.

Students will learn how to craft high-level humanities queries about cultural and social texts, how to design specific and effective queries for large databases of words and images, and how to link those two lines of investigation. Students will collaborate with one another and with tool developers (whom I will invite as guests to the seminar) to conduct their data analyses and produce visualizations. The student teams will then co-author papers that they may consider submitting for conference presentations and/or journal publications. With a Graduate Student Instructor, I will teach a curriculum that orients students to relevant humanities and data methods generally, and then will closely advise and guide student teams’ research projects, and facilitate their cooperation with tool developers.

**NWMEDIA 290-003, 4 units**  
Critical Practices: People, Places, Participation  
J. Miller

A hands-on, studio design course where students work at the intersection of technological innovation and socially engaged art. Students will integrate a suite of digital fabrication tools with social design methods to create work that engages in cultural
critique. Working with innovative technologies and radical, new art practices, this course will explore: hybrid art forms, critical design for community engagement, interventions in public spaces, tactical media and disobedient objects. These new making strategies will reframe our notions of people, places and participation.

**NW MEDIA C262, 4 units**  
*Laboratory also required*  
Theory and Practice of Tangible User Interfaces  
Kimiko Ryokai

This course explores the theory and practice of Tangible User Interfaces, a new approach to Human Computer Interaction that focuses on the physical interaction with computational media. The topics covered in the course include theoretical framework, design examples, enabling technologies, and evaluation of Tangible User Interfaces. Students will design and develop experimental Tangible User Interfaces using physical computing prototyping tools and write a final project report.

**ART 218-1, 4 units**  
Theory and Criticism  
S. Syjuco

Weekly meetings will provide a forum for the discussion of issues related to assigned readings in the fields of esthetics, theory and art criticism.

**CY PLAN C241, 4 units**  
Research Methods in Environmental Design  
P. C. Bosselmann


**ESPM C252-001, 3 units**  
(also ANTHRO C254-001, HIST C250-001, STS C200-001)  
Topics in Science and Technology Studies  
M. Mazzotti

This course provides a strong foundation for graduate work in STS, a multidisciplinary field with a signature capacity to rethink the relationship among science, technology, and political and social life. From climate change to population genomics, access to medicines and the impact of new media, the problems of our time are simultaneously scientific and social, technological and political, ethical and economic.

**INFO 213-001, 4 units**  
User Interface Design and Development  
Staff


**INFO 216-001, 3 units**  
Computer Mediated Communication  
C. Cheshire

This course covers the practical and theoretical issues associated with computer-mediated communication (CMC) systems (e.g., email, newsgroups, wikis, online games, etc.). We will focus on the analysis of CMC practices, the relationship between technology and behavior, and the design and implementation issues associated with constructing CMC systems. This course primarily takes a social scientific approach (including research from social psychology, economics, sociology, and communication).

**INFO 290, 1-4 units**  
Sensors, Humans, Data, Apps  
J. Chuang

**INFO 290-005, 1-4 units**  
Machine Learning in Education  
Z. Pardos

**INFO 290A-003, 1-2 units**  
Social Data Revolution  
A. Weigend
Free communication has changed the world, including the expectations and work and play. The class begins with the two data revolutions-- the first about passively collected clicks on the web, the second about actively contributed data, as platforms like Facebook empower individuals to contribute a variety of quantitative and qualitative data (transactions, social relations, attention gestures, intention, location, and more.) With active student participation, we explore the far-reaching implications of the consumer data revolution for individuals, communities, business, and society.

Undergraduate courses:

**NWMEDIA 190-001, 4 units**  
(also RHETOR 114-001)  
The Rhetoric of New Media  
D. Bates

This course examines a range of digital media practices including hypertext, interactive drama, videogames, literary interactive fiction, and socially constructed narratives in multi-user spaces. Through a mixture of readings, discussion, and project work, we will explore the theoretical positions, debates, and design issues arising from these different practices. Topics will include the rhetorical, ludic, theatrical, narrative political, and legal dimensions of digital media.

**NWMEDIA 190-002, 4 units**  
(also NWMEDIA 290-001, THEATER 266-001)  
Making Sense of Cultural Data: Combining Humanities and Machine Learning Approaches to Analyze News, Film, Television, and Social Media  
A. De Kosnik

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**NWMEDIA 190-003, 4 units**  
Critical Practices: People, Places, Participation  
J. Miller

A hands-on, studio design course where students work at the intersection of technological innovation and socially engaged art. Students will integrate a suite of digital fabrication tools with social design methods to create work that engages in cultural critique. Working with innovative technologies and radical, new art practices, this course will explore: hybrid art forms, critical design for community engagement, interventions in public spaces, tactical media and disobedient objects. These new making strategies will reframe our notions of people, places and participation.

**ART 21-001, 4 units**  
Digital Photography: The Image and the Hive Mind  
S. Syjuco

This class provides a basic foundation for digital photography with hands-on instruction in the use of digital cameras and online image dissemination. Topics include image capture, composition, image
syntax, image analysis, image manipulation, metatext production, and image sequencing for visual narratives. We also study image dissemination through online networks including social networks, blogs, news, storage, search, and print services. Rather than limiting the discussion of photography to the production of the photographic image itself, we explore in written assignments how the reception of images can change based on context, usage, and network dynamics. While we rely on required DSLR digital cameras to produce images for weekly photographic assignments, we also experiment with alternate digital image generation techniques from telescopes to microscopes. All coursework will be posted and discussed online as well as in weekly lectures, workshops, and critiques. Course readings cover the history of photography, the theory of photographic reproduction and the theory of networked and memetic dissemination.

**ART 26, 4 units**  
**Moving Image Media Production**  
**Staff**

This course provides students with the technological and conceptual groundwork for advanced courses in video art and filmmaking including the use of digital cameras, sound recording, basic lighting techniques, digital editing, compression, and online dissemination. We will focus on what makes compelling moving images that elicit powerful intellectual and emotional responses. The course also explores the range of techniques and languages of creative video making from traditional story genres to more contemporary experimental forms. The course consists of weekly lectures, screenings, discussions and a lab section. The lab is a production workshop in which students will produce a series of short exercises and a final project.

**ART 171-001, 4 units**  
**Digital Video: The Architecture of Time**  
**N. K. Braun**

This hands-on studio course is designed to present students with a foundation-level introduction to the skills, theories and concepts used in digital video production. Non-linear and non-destructive editing methods used in digital video are defining new "architectures of time" for cinematic creation and experience, and offer new and innovative possibilities for authoring new forms of the moving image. This course will expose students to a broad range of industry standard equipment, film and video history, theory, terminology, field and post-production skills. Students will be required to technically master the digital media tools introduced in the course. Each week will include relevant readings, class discussions, guest speakers, demonstration of examples, and studio time for training and working on student assignments.

**COMPSCI 10, 4 units**  
**The Beauty and Joy of Computing**  
**D. Garcia**

An introduction to the beauty and joy of computing. The history, social implications, great principles, and future of computing. Beautiful applications that have changed the world. How computing empowers discovery and progress in other fields. Relevance of computing to the student and society will be emphasized. Students will learn the joy of programming a computer using a friendly, graphical language, and will complete a substantial team programming project related to their interests.

**COMPSCI 160, 4 units**  
**User Interface Design and Development**  
**B. Hartmann**

The design, implementation, and evaluation of user interfaces. User-centered design and task analysis. Conceptual models and interface metaphors. Usability inspection and evaluation methods. Analysis of user study data. Input methods (keyboard, pointing, touch, tangible) and input models. Visual design principles. Interface prototyping and implementation methodologies and tools. Students will develop a user interface for a specific task and target user group in teams.

**COMPSCI 188, 4 units**  
**Introduction to Artificial Intelligence**  
**Staff**

Basic ideas and techniques underlying the design of intelligent computer systems. Topics include heuristic search, problem solving, game playing,
knowledge representation, logical inference, planning, reasoning under uncertainty, expert systems, learning, perception, language understanding.

**COMPSCI 195-001, 1 unit**  
Social Implications of Computer Technology  
J. Hug

Topics include electronic community; the changing nature of work; technological risks; the information economy; intellectual property; privacy; artificial intelligence and the sense of self; pornography and censorship; professional ethics. Students will lead discussions on additional topics.

**ENVDES 1, 3 units**  
Introduction to Environmental Design  
N. De Monchaux

This course will teach anyone how to start to be a designer, not just of drawings and objects, but also buildings, landscapes, and urban spaces. And not just in isolation, but in the complex web of ecological and man-made systems which makes up our shifting environment. You will take from the course first-hand experience of drawing, measuring, and design which form the basis of the professions of architecture, landscape architecture, and urban planning and which culminate in a final design project in the course. The course is open to all undergraduate students.

**INDENG 115-001, 3 units**  
Industrial and Commercial Data Systems  
K. Goldberg

Design and implementation of databases, with an emphasis on industrial and commercial applications. Relational algebra, SQL, normalization. Students work in teams with local companies on a database design project. WWW design and queries.

**JAPAN 181: 4 units**  
Reframing Disasters: Fukushima, Before and After  
D.C. O’Neill

The course considers the different literary, social and ethical formations that arise or are destroyed in disaster. It explores how Japanese literature and media, before and after 3:11, attempt to translate the un-representable, and in so doing, to create a new type of literacy about 1) trauma and the temporality of disaster, 2) precarity, community and the public sphere and 3) sustainability and ecological scale. The course will pay particular attention to a range of works that explicitly or obliquely reframe iconic or popular representations of disasters in cinema, literature, photography and social media, taking into account of the readiness with which certain cultural forms lend themselves to vistas of disaster. Prerequisites: None.

**MEDIAST 102, 4 units**  
Effects of Mass Media  
E. Timke

This course examines the often contentious history of communication theory concerning media effects. At issue among scholars working within different research traditions are core disagreements about what should be studied (institutions, texts, audiences, technologies), how they should be studied, and even what constitutes an “effect.” Course readings and lectures stress an understanding of different empirical and critical research traditions by focusing on the social, political, and historical contexts surrounding them, the research models and methods they employ, as well as the findings and conclusions they have reached. Course assignments and exams assess student understanding of course readings as well as the ability to apply mass media theory to new media texts.

**MEDIAST 165-001, 4 units**  
Internet and Culture  
J. Jackson

This class uses the approaches of media studies and cultural studies to critically consider how historical and emerging new media technologies as well as the behaviors and forms of cultural production associated with them influence and are themselves influenced by our everyday practices and lived experiences. It focuses particularly on concerns of identity, community, access, citizenship, industry, and regulation as these relate...
to social networking, collective endeavor, and public speech.

**MUSIC 109-001, 3 units**  
Music Cognition: Mind Behind the Musical Ear  
J. Bamberger

The goal of this class is to interrogate and make explicit the powerful musical intuitions that are at work as you make sense of the music all around you. What is the nature of the knowledge that is guiding these intuitions? How does this knowledge develop in ordinary and extraordinary ways? To approach these questions, small composition-like projects aided by a specially designed computer music environment will function as a workplace. You will explore, experiment, question, and reflect on how and what you know how to do as you generate the musical coherence that you seem simply to find.

**RHETOR 136, 4 units**  
Art and Authorship  
W. Wong

Study of narratives and visual cultures of art and its authors, including questions of what is art, who authors it, the boundaries of works and artistic personae, and how aesthetic, economic, and legal regimes of artistic authorship are historicized.

**SOCIOl 166, 4 units**  
Society and Technology  
L. Huang

This course studies the interaction between society and technologies in a comparative and multicultural perspective. Some topics covered include the relationship between technology and human society; technology, culture and values; technology in the new global economy; development and inequality; electronic democracy; how technology has transformed work and employment; and the challenges of technological progress and the role that society plays in addressing these challenges.

**THEATER 26, 4 units**  
Introduction to Performance Studies  
A. Marino

This course introduces the critical terms and practices of the contemporary study of performance. Several key terms and important genres of artistic and social performance will be engaged; the course will draw critical and disciplinary methods from anthropology and ethnography, from the theory of dance and theater, from literary and cultural theory. Critical and theoretical concepts will be used to analyze a wide range of live and recorded performances, as well as performance texts.

**THEATER 119, 4 units**  
Performance Theory: Modernism  
S. Steen

An examination of a theoretical topic or perspective on performance, with specific attention to the interface between theoretical endeavor and dramatic, nondramatic, and nontheatrical modes of performance; may involve visiting artists. Topics vary from semester to semester.

**FOR MORE INFORMATION or to suggest changes or additions, please contact**  
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