# **New Media**

## **Overview**

The Berkeley Center for New Media (BCNM) is a focal point for research and teaching about new media, led by a highly interdisciplinary community of 120 affiliated faculty, advisers, and scholars from 35 UC Berkeley departments including Architecture, Philosophy, Film Studies, Art History, Performance Studies, and Music; the Schools of Engineering, Information, Journalism, and Law; and the Berkeley Art Museum. BCNM is located at a global center for design and information technology and based in a public research university known for alternative thinking.

The mission is to critically analyze and help shape developments in new media from cross-disciplinary and global perspectives that emphasize humanities and the public interest.

All media (Latin for "middle elements") facilitate transformation: by definition, media are transformative. From the stone tablet to the printing press to the Internet, media have become increasingly reconfigurable. The value of a medium is often related to its capacity for reconfiguration. To claim a medium as "new" is to posit a meaningful improvement over prior media. Thus new media are highly reconfigurable and doubly transformative: they achieve a transformation of prior modes of transformation.

New media often produce new perceptions, new behaviors, and new insights, yet new media remain deeply rooted in powerful aesthetic, cultural, and political forces. As media transform, they often distort. Sophocles observed, "Nothing vast enters the life of mortals without a curse." BCNM actively engages scholars who critically examine the opportunities and risks associated with new media and who consider how new media can constructively benefit education, political engagement, privacy, and aesthetic experience.

BCNM catalyzes research, educates future leaders, and facilitates public discourse through courses, lectures, symposia, and special events. BCNM has established cross-disciplinary faculty positions and a special program for PhD students. The BCNM supports academic modes of scholarship while encouraging unorthodox artworks, designs, and experiments. By reaching out to students, researchers, industry figures, and the broader public, BCNM stimulates new perspectives on contemporary new media.

## **Undergraduate Program**

There is no undergraduate program in New Media.

# **Graduate Programs**

New Media (http://guide.berkeley.edu/archive/2014-15/graduate/degree-programs/new-media): Designated Emphasis (DE), graduate certificate

## **New Media**

NWMEDIA R1B New Media Reading and Composition 4 Units How do media shape our perception of our environment? What is at stake when we adopt or create new media? This seminar provides continued training in expository and argumentative writing, with an emphasis on new media. Satisfies the second half of the Reading and Composition requirement.

### **Hours & Format**

Fall and/or spring: 15 weeks - 4 hours of seminar per week

#### Summer:

6 weeks - 10 hours of seminar per week 8 weeks - 8 hours of seminar per week 10 weeks - 6 hours of seminar per week

#### **Additional Details**

Subject/Course Level: New Media/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

NWMEDIA 39A Freshman Seminar in New Media 1 - 4 Units This freshman seminar offers lower division students the opportunity to explore new media with a faculty member and a group of peers in a small-seminar setting.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 1-4 hours of seminar per week

#### Summer:

6 weeks - 2.5-10 hours of seminar per week 8 weeks - 2-8 hours of seminar per week 10 weeks - 2-7 hours of seminar per week

## **Additional Details**

Subject/Course Level: New Media/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

NWMEDIA 90 Introduction to New Media 1 - 4 Units
See Schedule of Classes for current section offerings. Topics introduce
new media and related issues.

### **Rules & Requirements**

Repeat rules: Course may be repeated for credit when topic changes.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 1-4 hours of seminar per week

#### Summer:

3 weeks - 5-15 hours of seminar per week 6 weeks - 3-10 hours of seminar per week 8 weeks - 2-8 hours of seminar per week 10 weeks - 1.5-6 hours of seminar per week

## **Additional Details**

Subject/Course Level: New Media/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

NWMEDIA 150AC New Media and American Cultures 4 Units
This course studies the influence of new media on various cultures in the
U.S. and/or the influence of American cultures on new media. Topics vary
by semester. Check current Schedule of Classes or Berkeley Center for
New Media web site for current course offerings (bcnm.berkeley.edu).

**Rules & Requirements** 

Requirements this course satisfies: Satisfies the American Cultures requirement

**Repeat rules:** Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

**Hours & Format** 

Fall and/or spring: 15 weeks - 3-4 hours of lecture per week

Summer:

6 weeks - 7-9 hours of lecture per week 8 weeks - 5-7 hours of lecture per week 10 weeks - 4-6 hours of lecture per week

**Additional Details** 

Subject/Course Level: New Media/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

NWMEDIA 190 Special Topics in New Media 1 - 4 Units See Schedule of Classes for current section offerings. Topics deal with new media and related issues.

**Rules & Requirements** 

**Repeat rules:** Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer:

3 weeks - 5-15 hours of lecture per week 6 weeks - 2.5-10 hours of lecture per week 8 weeks - 1.5-7.5 hours of lecture per week 10 weeks - 1.5-6 hours of lecture per week

**Additional Details** 

Subject/Course Level: New Media/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

NWMEDIA 198 Directed Group Study 1 - 3 Units

Course may be student-intitated or initiated by a faculty affiliate of the Center for New Media. The subject matter will vary from semester to semester. Student initiated courses will be taught by a student facilitator under the supervision of the faculty sponsor, who must be a faculty affiliate of the Berkeley Center for New Media.

**Rules & Requirements** 

Prerequisites: Upper division standing

**Credit Restrictions:** Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

**Repeat rules:** Course may be repeated for credit. Course may be repeated for credit when topic changes.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-3 hours of lecture per week

**Additional Details** 

Subject/Course Level: New Media/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

NWMEDIA 200 History and Theory of New Media 4 Units
This course provides a broad historical and theoretical background for
new media production and practice. The class will map out theoretical
approaches from different disciplines and allow graduate students to
discuss and apply them to their own research projects.

**Rules & Requirements** 

**Prerequisites:** Graduate standing or consent of instructor. Required for all students in the Designated Emphasis in New Media

**Hours & Format** 

Fall and/or spring: 15 weeks - 4 hours of seminar per week

**Additional Details** 

Subject/Course Level: New Media/Graduate

Grading: Letter grade.

### NWMEDIA 201 Questioning New Media 3 Units

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.

### **Rules & Requirements**

**Prerequisites:** Graduate standing or consent of instructor. Required of all students in the Designated Emphasis in New Media

**Repeat rules:** Course may be repeated for credit. Course may be repeated for credit when topic changes.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 1 hour of lecture and 2 hours of colloquium per week

#### **Additional Details**

Subject/Course Level: New Media/Graduate

**Grading:** Letter grade. **Instructor:** Goldberg

### NWMEDIA 202 New Media Methods 3 Units

In this methods course we will study key languages of new media innovation, ranging from flow charts to scripting languages and circuit diagrams. Our study method involves the creation and application of sensing devices in an urban context, and engages students in establishing chains of references which connect ground truth to data, data to information, information to people, people to actions, and actions to policies. Taking into account technical, political, cultural and literacy questions we seek to connect our data production work with information needs of underserved communities in the Bay Area region.

## Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

#### Summer:

6 weeks - 9 hours of seminar per week 8 weeks - 6 hours of seminar per week 10 weeks - 5 hours of seminar per week

## **Additional Details**

Subject/Course Level: New Media/Graduate

Grading: Letter grade.

### NWMEDIA 203 Critical Making 4 Units

Critical Making will operationalize and critique the practice of "making" through both foundational literature and hands on studio culture. As hybrid practitioners, students will develop fluency in readily collaging and incorporating a variety of physical materials and protocols into their practice. Students will envision and create future computational experiences that critically explore social and culturally relevant technological themes. No previous technical knowledge is required to take this course. Class projects involve basic programming, electronic circuitry, and digital fabrication design. Tutorials and instruction will be provided, but students will be expected to develop basic skills in these areas to complete course projects.

### **Hours & Format**

Fall and/or spring: 15 weeks - 2 hours of lecture and 2 hours of studio per week

#### Summer:

6 weeks - 4 hours of lecture and 8 hours of studio per week 8 weeks - 4 hours of lecture and 4 hours of studio per week 10 weeks - 3 hours of lecture and 3 hours of studio per week

#### **Additional Details**

Subject/Course Level: New Media/Graduate

Grading: Letter grade.

NWMEDIA C262 Theory and Practice of Tangible User Interfaces 4 Units 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.

### **Hours & Format**

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of laboratory per week

### **Additional Details**

Subject/Course Level: New Media/Graduate

Grading: Letter grade.

Instructor: Ryokai

Also listed as: INFO C262

NWMEDIA C263 Technologies for Creativity and Learning 3 Units How does the design of new educational technology change the way people learn and think? How do we design systems that reflect our understanding of how we learn? This course explores issues on designing and evaluating technologies that support creativity and learning. The class will cover theories of creativity and learning, implications for design, as well as a survey of new educational technologies such as works in computer supported collaborative learning, digital manipulatives, and immersive learning environments.

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of seminar per week

**Additional Details** 

Subject/Course Level: New Media/Graduate

Grading: Letter grade.

Instructor: Ryokai

Also listed as: INFO C263

NWMEDIA C265 Interface Aesthetics 2 Units

This course will cover new interface metaphors beyond desktops (e.g., for mobile devices, computationally enhanced environments, tangible user interfaces) but will also cover visual design basics (e.g., color, layout, typography, iconography) so that we have systematic and critical understanding of aesthetically engaging interfaces. Students will get a hands-on learning experience on these topics through course projects, design critiques, and discussions, in addition to lectures and readings.

**Hours & Format** 

Fall and/or spring: 15 weeks - 2 hours of lecture per week

**Additional Details** 

Subject/Course Level: New Media/Graduate

Grading: Letter grade.

Instructor: Ryokai

Also listed as: INFO C265

NWMEDIA 290 Special Topics in New Media 1 - 4 Units See Schedule of Classes for current section offerings. Topics deal with

new media and related issues.

**Rules & Requirements** 

Repeat rules: Course may be repeated for credit as topic varies. Course

may be repeated for credit when topic changes.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer:

3 weeks - 5-15 hours of lecture per week 8 weeks - 1.5-7.5 hours of lecture per week 10 weeks - 1.5-4.5 hours of lecture per week

**Additional Details** 

Subject/Course Level: New Media/Graduate

Grading: Letter grade.

NWMEDIA 299 Individual Study or Research 1 - 4 Units Individual study or research with Center for New Media- affiliated faculty. This course provides the opportunity to search out and study in detail subjects unavailable in the ordinary course offerings. Unit credit will reflect conparable work per unit as regular courses, and will include both meetings with faculty sponsor and independent work.

**Rules & Requirements** 

**Repeat rules:** Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-4 hours of independent study per week

Summer: 8 weeks - 1.5-7.5 hours of independent study per week

**Additional Details** 

Subject/Course Level: New Media/Graduate

Grading: Letter grade.