

# New Media

The Berkeley Center for New Media (BCNM) offers two programs for graduate students at UC Berkeley, a Designated Emphasis in New Media and a Graduate Certificate.

## Designated Emphasis

BCNM's designated emphasis is for selected students from any Berkeley doctoral program. It provides enhanced skills in analyzing and/or designing future media with an awareness of historical, social, cultural, and other perspectives that might not be visible from any single disciplinary point of view. Students completing the PhD program receive the designation "in New Media" on their diplomas.

## Graduate Certificate

The Graduate Certificate in New Media serves as an adjunct to existing master's degree-granting programs. Students receive a certificate with the designation: "Graduate Certificate Program in New Media," which certifies their successful completion of the New Media requirements.

The award is posted to students' transcripts. Designed to enhance interdisciplinary graduate studies at UC Berkeley, the Graduate Certificate Program emphasizes critical understanding of the nature and implications of new media, broadly conceived, drawing on theories and methodologies from across the disciplinary spectrum—the arts, the humanities and social sciences, and science and engineering. The Graduate Certificate in New Media provides students with a competitive edge for some of the most desirable jobs in industry and academia, and may enhance opportunities for innovative and collaborative research.

## Admission to the Designated Emphasis

Any UC Berkeley PhD student in good standing may apply. Admission to the BCNM Designated Emphasis program is determined by the BCNM DE Academic Programs Committee. To apply, students must send a letter of intent, their curriculum vitae, a letter of recommendation from their UC Berkeley faculty adviser, their Berkeley course transcript, petition for change of major or degree goal form, BCNM course requirements worksheet, along with the BCNM cover form to the Center for New Media. Applications are accepted twice a year, with deadlines for admission on March 1 and November 1.

## Admission to the Masters Certificate Program

Any UC Berkeley Masters student in good standing may apply. To apply, students should send a letter of intent, their curriculum vitae, a letter of recommendation from their UC Berkeley faculty advisor, their Berkeley course transcript, BCNM course requirements worksheet, along with the BCNM cover form to the Center for New Media. Additionally, applicants may supplement their portfolio with their own research publications and creative productions, which pertain to the critical study of new media, in the form of DVDs, websites, and so on. Submitting a creative portfolio is optional. Applications are accepted twice a year, with deadlines for admission on March 1 and November 1.

## Curriculum/Coursework

### Core courses

|             |                                 |   |
|-------------|---------------------------------|---|
| NWMEDIA 200 | History and Theory of New Media | 4 |
|-------------|---------------------------------|---|

|             |                       |   |
|-------------|-----------------------|---|
| NWMEDIA 201 | Questioning New Media | 3 |
| NWMEDIA 202 | New Media Methods     | 3 |

### Electives

Select at least two additional 3-4 unit courses that significantly deal with new media, approved by the BCNM Graduate Adviser

It is possible to provide evidence of equivalent level of experience/skill in an area and request a waiver of a core course by writing a petition to the D. Academic Program Committee, endorsed by your program adviser, describing how the requirement has been met with a previous course (include a copy of your transcript to confirm completion) or provide evidence of equivalent experience. Questions about the core requirements may be addressed to the BCNM Graduate Adviser, Coye Cheshire, at coye@berkeley.edu .

## Qualifying Examination

Your PhD Qualifying Exam Committee must include at least one member of the BCNM Graduate Group / Affiliated Faculty who will evaluate your knowledge related to the Designated Emphasis.

## Dissertation

Your PhD dissertation topic must be related to New Media and your PhD Dissertation Committee must include at least one member of the BCNM Graduate Group / Affiliated Faculty who can evaluate it from that perspective.

## Curriculum/Coursework

### Core classes

Certificate students must take one of the following core seminars offered each year by BCNM:

|             |                                 |   |
|-------------|---------------------------------|---|
| NWMEDIA 200 | History and Theory of New Media | 4 |
| NWMEDIA 201 | Questioning New Media           | 3 |
| NWMEDIA 202 | New Media Methods               | 3 |

### Elective Courses

Students must complete new media-related breadth courses in at least two of the following three areas: technology, art/design, and humanities. The two courses must be approved by the BCNM graduate advisor. Breadth courses must be taken at Berkeley (transfer credit will not be accepted).

## Lyman Fellowship

The Peter Lyman Graduate Fellowship in new media, established in the memory of esteemed UC Berkeley Professor Peter Lyman, provides a stipend to a UC Berkeley PhD candidate to support the writing of his or her PhD dissertation on a topic related to new media. The fellowship is supported by donations from Professor Barrie Thorne, Sage Publications and many individual friends and faculty. Funds total approximately \$5000 each year.

## Summer Research Fellowships

The Center for New Media endeavors to offer five \$1,000 summer research fellowships each year to support its graduate students' research agendas.

## Additional Conference and Research Support

Each year, BCNM provides seed funding for student-led conferences. These awards are available by petition to the Director and Program Officer.

## Space

Cubicles are available by application on the fourth floor of Sutardja Dai Hall. The BCNM also administers 340 Moffitt, which can be booked for classes, office hours, seminars, and meetings.

The BCNM strives to provide its graduate students with opportunities for teaching experience. Each year, the Center employs three GSIs to staff small discussions or assist with grading for its three core courses. The BCNM seeks to offer summer session courses and encourages its students to apply for these positions.

For more information, check out the website (<http://bcnm.berkeley.edu/index.php/academic>) .

## New Media

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 comparable 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.