

**MOVING IMAGE ARCHIVING & PRESERVATION PROGRAM  
HANDLING COMPLEX MEDIA, CINE-GT 1805**

Version #1 – 1/27/16

Spring 2016 - Wednesdays, 12:30 pm – 4:30 pm, room 643, 665 Broadway. **Please note different times/places for a few classes, and an additional class may be added to complete the final project. A few classes may be re-scheduled for a Mon. afternoon or a M-T-or F morning.**

Instructor: Mona Jimenez  
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**GOALS:** This seminar will increase students' knowledge of primary issues and emerging strategies for the conservation and preservation of new media and digital works. Students will gain practical skills with identification, assessment and care for works as a whole and their component parts, particularly in the areas of audio and visual media and digital, interactive media projects that are stored on fixed media, presented as installations, and/or existing in networks. Examples of production modes/works to be studied are animations, web sites, games, interactive multimedia (i.e., educational/artist CDROMs), and technology-dependent art installations. In addition, students will learn about emerging archival practices for carriers that contain a mix of complex media and other materials, such as computer hard drives. Students will compare and test principles and practices of traditional collection management with these works, and will evaluate and use developing tools and methodologies.

**EXPECTATIONS:** Each student will complete three assignments as outlined below. Attendance at all classes is expected unless excused; our work together will be intensive. Notify the instructor prior to class of any absences; absences for classes where work is due or presentations are scheduled will require a doctor's note if due to illness or injury. Deadlines for assignments are firm and any extensions on written work due to unavoidable circumstances will require prior approval. Grades will be primarily based on assignments: Emulator research (20%); multimedia research (40%); and media installation project (40%). Your level of class preparedness and participation will also impact the grade, as well as any unexcused absences or unexcused late work.

- Assignment #1: Emulator research. Due date: February 24. Working in pairs, student will be responsible for the installation and testing of a minimum of two emulators on computers in the Old Media Lab. Each pair will be assigned a computer and one or more media works for testing. Emulators will be assigned on Wed. February 3.
- Assignment #2: Multimedia research. Due date: Presentation, March 9; paper, March 23. Using multimedia works stored on obsolete media, students will take a series of research steps to explore the impact of changing technology on the presentation, experience and meaning of these works. Each student will:
  - Create a disk image of a multimedia work and apply forensic tools to learn about the technical and structural characteristics of the work
  - Research the likely production process and computing environment in which the work was produced
  - Examine the work using legacy computers, emulators and current computer systems to determine significant properties, describe risks, and determine what if any losses occur with the use of emulators and subsequent computer systems
  - Propose strategies of access and conservation/preservation considering such strategies as migration, emulation, conservation of equipment, etc.
  - Each student will present their findings to the class in the form of a 15 minute presentation and will submit a 4-5 page paper, double-spaced, summarizing the above.

The paper will incorporate any feedback or subsequent research as needed after the presentation.

- Assignment #3: Case studies of two time-based media installation artworks. Two works from the Museum of Modern Art will be researched and analyzed through individual and group work, over the course of several weeks. Students will prepare research questions and may interview the artist or programmer. Each student will be responsible for a section of resulting reports and/or will serve as editor. Due date: May 4. After review by instructor, minor revisions may be needed by May 11.

Please note that as needed all written work must utilize proper citations, including proper web citations. Works that do not include complete citations will be returned for revision and considered late. Please see the plagiarism policy here and do not hesitate to seek advice where needed:  
< <http://www.nyu.edu/tisch/preservation/handbook.html>>

**MIAP Digital Archive:** In addition to submitting assignments in print form, all course papers/projects will be submitted in electronic form via NYU Classes. The materials will be made part of the MIAP digital archive in a private space for faculty use, and on the MIAP web site, unless there is a legitimate reason for it to be restricted.

Standard file naming convention: 14s\_1805\_smith\_a1.doc  
Restricted file naming convention: 14s\_1805\_smith\_a1\_x.doc  
Where:

- 14s = spring 2014
- 1805 = class number
- smith = author's last name
- a1 = assignment number 1
- x = restricted work designation

#### **LOGISTICS AND ADDITIONAL RESPONSIBILITIES:**

This course will have a web presence on NYU Classes – Please log-on at least once a week.

**Access to Labs:** Please see <http://www.nyu.edu/its/labs/> for locations and descriptions of NYU's computer labs if needed for your research. In addition, access will be provided to the 'Old Media Lab', 721 Broadway, room 644B.

**Cell phones:** Turn completely off during class.

#### **Class 1: Wednesday, January 27**

##### Topics/activities:

- Syllabus review
- Discussion of methodology for risk assessment developed through the EU project "Inside Installations" (see next week's reading)
- Case study exercise with complex media work

#### **Class 2: Wednesday, February 3**

##### Due this class:

- Read:
  - Laurenson, Pip (2007). "Part 1: Risk Assessment" in *Inside Installations: Preservation and Presentation of Installation Art*. Instituut Collectie Nederland/Foundation for the Conservation of Contemporary Art: Amsterdam. Accessed 1/23/08 at [http://www.inside-installations.org/research/detail.php?r\\_id=83&ct=preservation](http://www.inside-installations.org/research/detail.php?r_id=83&ct=preservation)

- Laue, Andrea. "How the Computer Works" in\_Schreibman, Susan, Ray Siemens and John Unsworth, ed. A Companion to Digital Humanities, Oxford: Blackwell, 2004. Accessed 1/15/12 at <http://www.digitalhumanities.org/companion/view?docId=blackwell/9781405103213/9781405103213.xml>
- Kirschenbaum, Matthew G., Richard Ovenden and Gabriela Redwine. Digital Forensics and Born-Digital Content in Cultural Heritage Organizations. Washington DC: Council on Library and Information Resources. December 2010. Accessed 2/13/12 at <http://clir.org/pubs/reports/pub149/pub149.pdf>

Topics/activities:

- Removable media types and properties and disk imaging part 1.
- Introduction to Assignment #1: Emulation research.

**Class 3: Wednesday, February 10**

Due this class:

- Browse:
  - BitCurator Project: <http://www.bitcurator.net/>
  - Forensics Toolkit: <http://accessdata.com/solutions/digital-forensics/forensic-toolkit-ftk>
- Read:
  - Lee, Christopher A., Kam Woods, Matthew Kirschenbaum, and Alexandra Chassanoff (2013). "From Bitstreams to Heritage: Putting Digital Forensics into Practice in Collecting Institutions". White Paper. Accessed 1/25/16 at <http://www.bitcurator.net/docs/bitstreams-to-heritage.pdf>
  - Woods, Kam, Christopher A. Lee, and Simson Garfinkel. "Extending Digital Repository Architectures to Support Disk Image Preservation and Access." In *Proceedings of the 11th Annual International ACM/IEEE Joint Conference on Digital Libraries*, 57-66. New York, NY: Association for Computing Machinery, 2011. Accessed 1/25/16 at <http://www.ils.unc.edu/callee/p57-woods.pdf>
  - Rockwell, Geoffrey and Andrew Mactavish (2004). "Multimedia" in\_Schreibman, Susan, Ray Siemens and John Unsworth, ed. *A Companion to Digital Humanities*. Oxford: Blackwell. Accessed 1/15/12 at <http://www.digitalhumanities.org/companion/view?docId=blackwell/9781405103213/9781405103213.xml>

Topics/activities:

- Disk imaging part 2
- Analysis of disk images
- Lab work for Assignment #1: Emulator research

**Class 4: Wednesday, February 17**

Guests: Don Mennerich, Digital Archivist, NYU Digital Libraries and Julia Kim, Folklife Specialist & Digital Asset Manager, Library of Congress

Due this class:

- View:
  - Mennerich, Don (2014). "Managing Born Digital Archives: New Tools and Approaches", conference talk at *Urban Humanities: A Symposium on Research Development, Digital Archives, and Documentary Practices*. Accessed 1/25/16 at <https://www.youtube.com/watch?v=8qhHNhNNCqg>
- Read:
  - Knight, Gareth (2012). "The Forensic Curator: Digital Forensics as a Solution to Addressing the Curatorial Challenges Posed by Personal Digital Archives", *The International Journal of Digital Curation*, 7 (2), 40-63. Accessed 1/25/16 at <http://www.ijdc.net/index.php/ijdc/article/view/218/287>

- Kirschenbaum, Matthew G. (2004). "So the Colors Cover the Wires": Interface, Aesthetics, and Usability" in Schreibman, Susan, Ray Siemens and John Unsworth, ed. *A Companion to Digital Humanities*. Oxford: Blackwell. Accessed 1/15/12 at <http://www.digitalhumanities.org/companion/view?docId=blackwell/9781405103213/9781405103213.xml>
- Recommended (historical text)
  - Jimenez, Mona. "Interactive multimedia on CD-ROM: experiments with risk assessment". (conference paper) 2008. Accessed 1/18/09 at <http://www.nubrs.rs.ba/ifla/index.htm#11August>
  - Hedstrom, M., Lee, C., Olson, J., & Lampe, C. (2006). "The Old Version Flickers More": Digital Preservation from the User's Perspective. *The American Archivist*, 69 (1), 159-187. Retrieved February 1, 2015, from [http://www.ils.unc.edu/callee/dig-pres\\_users-perspective.pdf](http://www.ils.unc.edu/callee/dig-pres_users-perspective.pdf)

Topics/activities:

- Institutional workflows for managing, preserving and providing access to born digital acquisitions using digital forensics: NYU Digital Library
- Check-in on Assignment #1: Emulator research
- Lab work for Assignment #2: Multimedia research

**Class 5: Wednesday, February 24**

Guest (Invited): Dragan Espenschied, Digital Conservator, Rhizome

Due this class:

- Assignment #1 Emulator research due
- Browse:
  - Rhizome Artbase: <http://rhizome.org/art/artbase/>
  - Web sites captured with Webrecorder: <http://webenact.rhizome.org/>
  - Archive-It <https://webarchive.jira.com/wiki/display/ARIH/Welcome>
- Read:
  - von Suchodoletz, Dirk and Rechert, Klaus (2014). "Emulation as a Service: Framework for Curation and Rendering of Complex Media Objects", conference presentation at Curate Gear 2014. Accessed 1/25/16 at <http://ils.unc.edu/digcurr/curategear2014-talks/von-sucholodetz-curategear2014.pdf>
  - Rhizome (2106). "Rhizome Awarded \$600,000 by the Andrew W. Mellon Foundation to build Webrecorder". Blog post. Accessed 1/26/16 at <http://rhizome.org/editorial/2016/jan/04/webrecorder-mellon/>
  - Scott, J. (2015). "The Emularity". Retrieved January 26, 2015, from <http://ascii.textfiles.com/archives/4546>
  - Espenschied, D. (2012, January 1). Authenticity/Access. Retrieved January 26, 2015, from <http://contemporary-home-computing.org/1tb/archives/3214>

Topics/activities:

- Discussion of Assignment #1: Emulator research
- Structures and dependencies of web sites; emulation through web interfaces
- Theories and projects concerning the archiving and preservation of historical and contemporary web sites.

**Class 6: Wednesday, March 2**

Planned visit – New York Public Library. Details will follow.

Read:

- Schuessler, J. (2013). "Timothy Leary Video Games Unearthed in Archive". Retrieved January 26, 2015, from <http://artsbeat.blogs.nytimes.com/2013/09/27/timothy-leary-video-games-unearthed-in-archive/>

Topics/Activities:

- Archival processing and researcher access; case study of digital files in the Timothy Leary Papers
- Michelle presents Assignment #2

### **Class 7: Wednesday, March 9**

Guest: Becks, Art Archivist, Riot Games

Due this class:

- Browse: <http://www.riotgames.com/>

Due this class:

- Read
  - Henry Lowood, "Playing History with Games: Steps towards Historical Archives of Computer Gaming." (Conference Paper, Fall 2004.) Retrieved 1/30/08 at <http://aic.stanford.edu/sg/emg/library/pdf/lowood/Lowood-EMG2004.pdf>
  - Gooding, Paul and Melissa Terras. "'Grand Theft Archive': A Quantitative Analysis of the State of Computer Game Preservation" in *International Journal of Digital Curation*. Vol. 3, No. 4, 2008 accessed 2/11/12 at <http://www.ijdc.net/index.php/ijdc/article/view/85/56>
  - Guins, Raiford (2014). *Game After: A Cultural Study of Video Game Afterlife*. Cambridge MA and London: MIT Press. Pages TBA.
- Familiarize yourself with:
  - Library of Congress Preserving Virtual Worlds - <http://www.ndiipp.uiuc.edu/pca/> and read the final report on Phase 1. How They Got Game, Stanford University - <http://htgg2.stanford.edu/>
  - Video Game Preservation SIC of the International Game Developers Association - [http://www.igda.org/wiki/Game\\_Preservation\\_SIG](http://www.igda.org/wiki/Game_Preservation_SIG)
  - Game Preservation SIG/Digital Game Canon - [http://www.igda.org/wiki/index.php/Game\\_Preservation\\_SIG/Digital\\_Game\\_Canon/](http://www.igda.org/wiki/index.php/Game_Preservation_SIG/Digital_Game_Canon/)
  - Record/Replay - <http://polaris.gseis.ucla.edu/blanchette/RR.html>
- Browse:
  - Grand Text Auto - <http://grandtextauto.org/>
  - Emulators Unlimited <http://www.emuunlim.com/>

Topics/activities:

- Issues in and management of game archives
- Presentation of Assignment #2.

### **NO CLASS Wednesday March 16 – SPRING BREAK**

### **Class 8: Wednesday, March 23**

Due this class:

- View: Forging the Future Project <http://www.docam.ca/en/?p=258>
- Review the Variable Media Questionnaire < <http://variablemediaquestionnaire.net/>>
- Read:
  - Guggenheim Museum. *Permanence through Change: The Variable Media Approach*. Montréal: Daniel Langlois Foundation for Art, Science and Technology and New York: Guggenheim. Accessed 9/3/04 at <<http://www.variablemedia.net/>>. p. 7 – 45; 108 – 114.
  - Delve, Janet, Anderson, David et al (2012). *The Preservation of Complex Objects Vol. 1: Visualizations and Simulations*. Portsmouth, England: University of Portsmouth. Accessed 1/26/16 at [http://eprints.port.ac.uk/7745/1/pocos\\_vol\\_1.pdf](http://eprints.port.ac.uk/7745/1/pocos_vol_1.pdf). Pages TBA.
  - Jimenez, Mona. "The Artist Instrumentation Database Project" on web site of the Daniel Langlois Foundation for Art, Science and Technology. 2005. Accessed 8/1/05 at < <http://www.fondation-langlois.org/flash/e/index.php?NumPage=708>>.
  - Additional readings may be added as needed

Topics/activities:

- Approaches to documentation of complex media works and preservation actions. What forms of documentation are useful and appropriate for complex media works?
- Practice using Variable Media and Forging the Future tools.

**Class 9: Wednesday, March 30**

- Browse: Bibliography of conservation case studies and other literature. Details to follow.
- Read:
  - \_\_\_\_\_. Guide to Good Practice: Artist Interviews. 1999. International Network for the Conservation of Contemporary Art: Amsterdam. Accessed 1/23/08 <www.incca.org>. (see section Methodology>Artists Intent)
  - \_\_\_\_\_. Decision-making Model for the Conservation and Restoration of Modern and Contemporary Art. 1999. Foundation for the Conservation of Modern Art/Netherlands Institute for Cultural Heritage: Amsterdam. Accessed 1/23/08 <www.incca.org>. (see section Methodology>Ethics)
- Re-familiarize yourself with the forms previously provided from the “Matters in Media Art” site.
- See also the Inside Installations web site <http://www.inside-installations.org/home/index.php>

Topics/activities:

- Discussion of artist interview methodologies.
- Discussion of group projects at MoMA.
- Choose an article from the bibliography to report on April 13, 20 or 27.
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**NO CLASS Wednesday April 6 – Mona is at the Orphan Film Symposium**

**Class 11: Wednesday, April 13**

Examination of artist’s work at MoMA. Details to follow.

Topics/activities:

- Group work on the installations.
- Discussion of selected articles on bibliography.

**Class 11: Wednesday, April 20**

Examination of artist’s work at MoMA. Details to follow.

Topics/activities:

- Group work on the installations.
- Discussion of selected articles on bibliography.

**Class 12: Wednesday, April 27**

Due this class:

- Readings may be assigned as needed

Topics/activities:

- What needs to be done to complete reports on the installations? Students will discuss the visit, the status of projects, additional research, and will use the class as work time.
- Discussion of selected articles on bibliography.

**Class 13: Wednesday, May 4**

Due this class:

- Assignment #3 is due
- Present final report for the installation projects to museum partners. Discussion about areas of further investigation by the museum.
- Wrap-up on concepts and methodologies.