MOVING IMAGE ARCHIVING & PRESERVATION PROGRAM
HANDLING NEW MEDIA, H72.1805

Version 9/6/06
Fall 2006 - Mondays, 9:30 am – 1:30 pm, room 651
Instructor: Mona Jimenez
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GOALS: This seminar will increase students' knowledge of primary issues and emerging strategies for the preservation of new media and digital works. Students will gain practical skills with identification and risk assessment 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 networks. Examples of production modes/works to be studied are animations (individual works and motion graphics) web sites, games, interactive multimedia (i.e., educational/artist CDROMs), and art installations. Students will test principles and practices of traditional collection management with these works, such as appraisal, selection, care and handling, risk/condition assessment, "triage", description, and storage. They will develop an understanding of themes in the history and theory of new media, and will access resources for further study.

EXPECTATIONS: Each student will complete two short-term assignments and contribute to two substantial group projects. Attendance at all classes is expected; more than one unexcused absence will affect grading. Grades will be based on a combination of class preparedness and participation (30%); short-term assignments (10% each); projects (25% each.)

Please note that 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 read the **Plagiarism** Advisory at the end of the syllabus.

MIAP Digital Archive: In addition to submitted assignments in print form, all course papers/projects will be submitted to myself and Alicia Kubes in electronic form. The materials will be made part of the MIAP digital archive in a private space for faculty use, and on the MIAP web site. All assignments will be submitted with (1) a MIAP Submission Form and (2) file names that follow MIAP guidelines (which you will receive soon). You will need to indicate on the Submission Form any paper/project that cannot be published on the web due to confidentiality restrictions or other reasons to restrict access.

LOGISTICS AND ADDITIONAL RESPONSIBILITIES:

Texts: It is not necessary to purchase books for the course – all readings in hardcopy form, as well as most of those on the web, are on reserve in the Bobst Library and the Study Center in the Cinema Studies Department, 6th floor, 721 Broadway. Please note: occaisionally a reading is only available in one location.

Please note: Some readings have been assigned in other classes in the Moving Image Archiving and Preservation Program; however, the class is open to non-MIAP students so some repetition is necessary to create a context. It is expected that MIAP students will review these readings before class time to re-familiarize themselves with the concepts.

This course will have a web presence on "Blackboard" – Please log-on no later than September 14, 2006. More details will follow. The course is available on the "Academics "

tab in NYU Home.

Access to Computer Labs: Please see http://www.nyu.edu/its/labs/ for locations and descriptions of NYU's computer labs for work on your computer-related assignments.

Cell phones: Turn <u>completely off</u> during class as they may create problems with classroom audio.

Class 1: September 11
  <u>Topics/activities:</u>
- Introductions, syllabus review (40 min.)
- Discussion: What falls under the rubric "new media"? (50 min.)
- Review of basic audiovisual archival principles that we will apply to new media and digital media, and review of problems with digital longevity, according to frameworks proposed by a 1994 Task Force on Digital Information, and by Howard Besser. Viewing and discussion of works that illustrate preservation challenges. (90 min.)
- Overview of the nature of responses to these challenges from artist communities, libraries, museums, the archival profession, and others. See the course blackboard site for a list of resources. (30 min.)
- Discussion of Assignment #1: Distinctive Characteristics of Old and New Media. Write a short paper (2 pages) that compares and contrasts one "old media" work and one "new media" work. What are the similarities and differences? Discuss the concepts gained from Lev Manovich's "What is New Media?" and one other reading from the group below. Due September 15. (10 min.)

  Resources utilized in today's class:
  Edmundson, Ray. "Preservation: exploring nature and concept" in <u>Audiovisual Archiving: Philosophy and Principles</u>. Paris: UNESCO. 2004. Retrieved 8/31/04 at <<u>http://portal.unesco.org/ci/ev.php?URL_ID=15592&URL_DO=DO_TOPIC&URL_SECTION=201&reload=1086101143</u>>.
- Besser, Howard. "Digital Longevity" in <u>Handbook for Digital Projects: A Management Tool for Preservation and Access</u>. (Ed.) Maxine Sitts. Andover, MA: National Document Conservation Center. Accessed 8/31/04 at < <u>http://www.gseis.ucla.edu/%7Ehoward/Papers/sfs-longevity.html</u>>.
- Waters, Donald and John Garrett. <u>Preserving Digital Information, Report on the Task Force of Archiving of Digital Information</u>. Washington, DC: Council on Library and Information Services. 1996. Accessed at <http://www.clir.org/pubs/abstract/pub63.html>.

  To follow up on these topics and to complete Assignment #1 read:
  Manovich, Lev. "What is New Media?" in <u>The Language of New Media</u>. Cambridge, MA: Massachusetts Institute of Technology. 2001. p. 3 – 61. (Required.)

  Also read one of the following and incorporate into the assignment:

  Dietz, Steve. "What is New Media Called?" Accessed 9/5/05 at http://www.yproductions.com/writing/archives/000037.html
  Murray, Janet. "Inventing the Medium" in Noah Wardrip-Fruin and Nick Montfort, ed., <u>The New Media Reader</u>. Cambridge, MA and London: Massachusetts Institute of Technology. 2003. p. 3-11.
  Paul, Christiane. "Digital Technologies as a Tool" in <u>Digital Art</u>. London: Thames and Hudson. 2003. p. 27 – 65.
  Paul, Christiane. "Digital Technologies as a Medium" in <u>Digital Art</u>. London: Thames

and Hudson. 2003. p. 67 – 137.
Ross, David. "Transcript of Lecture by David Ross" in <u>Switch Lectures</u>, v. 5, No. 1.
Accessed 9/5/05 at http://switch.sjsu.edu/web/v5n1/ross/index.html.

Class 2: September 18
<u>Due this class:</u>
- Assignment #1

<u>Topics/activities:</u>
- Discussion of Assignment #1 (60 min)
- Review of major developments in computer history and digital production, incorporating overview of computer structures and storage including platforms, operating systems, software, code, programming languages, file formats and other topics. (90 min.)
- Practice with identification of legacy storage media and related computer environments. (60 min.)
- Discussion of Assignment #2 Research on Storage Devices/Media/File Formats. Each student will choose one device, one media format, and two file formats, gathering information that will aid preservationists in identifying the item and determining if or how media can be accessed. For the file formats, each student will gather information that will aid preservationists in identifying the file, how it can be read, and what the risk is to the file's longevity, such as if it is backward compatible. We will use one or more templates for this exercise. Cite all sources. Due October 2. (10 min.)

    Resources for Assignment #2:
- Cornell University Library. "Obsolescence" in <u>Digital Preservation Management: Implementing Short-term Solutions for Long-term Problems</u>. Accessed 9/2/04 at <http://www.library.cornell.edu/iris/tutorial/dpm/oldmedia/index.html>.
- "Whosit's Format: The Programming Resource" http://www.wotsit.org
- "My File Format" http://www.myfileformats.com/
- "File Format Encylopedia" http://pipin.tmd.ns.ac.yu/extra/fileformat/

    Resources for computer history:
- Charles Babbage Institute Center for the History of Information Technology. "Other Resources". Retrieved at <http://www.cbi.umn.edu/resources/index.html>.
- Computer History Museum. Home page. Accessed 8/28/04 at <http://www.computerhistory.org/>

Class 3: September 25 –
Please note: Class will meet in the computer lab at 35 West 4th Street, 2nd floor from 9:30 - 11:30, and then will move back to Room 651, Tisch, 721 Broadway.

    <u>Due this class:</u>
- Cornell University Library Research Department. "Basic Terminology" in <u>Moving Theory into Practice: Digital Imaging Tutorial</u>. Retrieved 9/4/04 at <http://www.library.cornell.edu/preservation/tutorial/intro/intro-01.html>.
- Smith, Abby. "Authenticity in Perspective" <u>in Authenticity in a Digital Environment</u>. Washington, DC: Council on Library and Information Services. 2000. Accessed at <http://www.clir.org/pubs/reports/pub92/contents.html>.
- PADI (Preserving Access to Digital Material) Selection Criteria http://www.nla.gov.au/padi/selection.html#app2

    <u>Topics/activities:</u>

- Lab work: overview of image files: types, formats, vector vs. bitmap; variables in still image capture (2 hours)
- Current standards for preservation of images; risks to longevity of image files. (30 min.)
- Discussion of readings. Considering the range of new media work, how does one develop selection criteria? Do existing theories of appraisal apply? What are key concepts used in institutional digital initiatives such as the digital library movement for maintaining digital works -- concepts such as originals, authenticity, integrity and context. What are key challenges to these concepts (posed by theoreticians, preservationists or the works themselves), such as those advanced by the Variable Media Initiative? (70 min.)

Class 4: October 2 –

Please note: Class will meet in the computer lab at 35 West 4th Street, 2nd floor from 9:30 - 11:30, and then will move back to Room 651, Tisch, 721 Broadway.

Due this class:
Assignment #2 Research on Storage Devices/Media/File Formats
- Eye-One Color. "How Well Do You Speak in Color?". http://i1color.com/knowledge/. Follow link to The Color Of Toast and read that section as well. Also go through the "Crash Course" at http://i1color.com/knowledge/crash_course.asp
- Technical Advisory Services for Images. "File Formats and Compression". http://www.tasi.ac.uk/advice/creating/fformat.html.

Topics/activities:
- Melitte Buchman, Digital Conversion Specialist in the NYU Digital Library will speak about image color spaces, color management, the impact of migration, and strategies and standards for maintaining high quality digital images and the "look and feel" of the original. (2 hours in lab)
- Discussion of Assignment #2. (50 min.)
- Review of principles of analog audio; the process and results of analog to digital conversion for audio. (50 min.)

NO CLASS October 9 – No NYU classes scheduled and AMIA week

Class 5: October 16 –

Please note: Class will meet in the computer lab at 35 West 4th Street, 2nd floor from 9:30 - 11:30, and then will move back to Room 651, Tisch, 721 Broadway.

Due this class:
- Dinkla, Soke. "The History of the Interface in Interactive Art". Accessed 9/5/05 at http://www.maryflanagan.com/courses/2002/web/HistoryofInterface.html
- Morse, Margaret. "The Poetics of Interactivity" in Women, Art and Technology. Cambridge, MA: Massachusetts Institute of Technology. 2003. p. 17 – 33.
- Iles. Chrissie. "Between the Still and Moving Image" in Into the Light: The Projected Image in American Art, 1964 - 1977. New York: Whitney Museum of American Art. 2002.

Topics/activities:
- Lab work: Capture of analog audio; recording digital audio; the potential impact of migration, identifying audio format. (2 hours)
- Discussion of reading: Interfaces, interactivity and behaviors. (50 min.)
- Review of principles of analog video; the process and results of analog to digital conversion for video. (50 min)

Class 6: October 23 –

Please note: Class will meet in the computer lab at 35 West 4th Street, 2nd floor from 9:30 - 11:30, and then will move back to Room 651, Tisch, 721 Broadway.

Due this class:
• Reading to be announced.

Topics/activities:
• Lab work: Capture of analog video; recording digital video; the potential impact of migration, identifying video formats (2 hours)
• Discussion of Assignment #3 Risk Assessment and Structure of Interactive CDROMs. This assignment has two parts. As Part 1, students will work as a group to do a collection assessment of the CDROM collection at the Avery Fisher Center for Music and Media in Bobst Library. As Part 2, students will analyze one CDROM work from the collection determining: What device will read this CDROM? Is a particular platform needed? What software is required? Is it available (on or off the disc)? What authoring system was used to create it? Is it proprietary? How many files does it include by type? What are the relationships between the files (diagram parts)? What "behaviors" are important to the work? Can it run on a newer system and if so, is it the same? What are the risks to this work? Due date: November 20 (30 min.)
• Group exercise deconstructing an older interactive CDROM using Diane Bertolo's "Probing into Science" (70 min.).

Class 7: October 30 –

Due this class:
• Beyers, Fred R. Care and Handling of CDs and DVDs: A Guide for Librarians and Archivists. Washington, DC: Council on Library and Information Services and National Institute of Standards and Technology. 2003. Accessed 8/31/04 at <http://www.clir.org/pubs/reports/pub121/contents.html>.
• Deborah Woodyard, "Farewell My Floppy: A Strategy for Migration of Digital Information," (National Library of Australia, 1997), available online at: http://www.nla.gov.au/nla/staffpaper/valadw.html
• Additional readings to be announced.

Topics/activities:

• Visit by Brian Drolet, former Project Manager at the Voyager Company, a producer of interactive CDROMs. (90 min.)
• Review of resources on care of optical media; strategies and issues with migration between storage media. What is your assessment of the plan undertaken by the National Library of Australia in Woodyard's article above? (65 min.)
• Discussion/problem-solving on preliminary findings for Assignment #3. (65 min.)

Class 8: November 6 –
Due this class:
• Complete HTML tutorial (to be assigned)
• Additional readings to be announced.

Topics/activities:
• Lab work: Review of web production and dependencies. (2 hours)

- Discussion: What are the range of strategies proposed for collection and preservation of web sites by libraries, archives, museums and independent media communities? What are pros and cons of different approaches? (80 min.)
- Check-in on progress on Assignment #3. (20 min.)

Class 9: November 13 –
Please note: Class will meet in the computer lab at 35 West 4th Street, 2nd floor from 9:30 - 11:30, and then will move back to Room 651, Tisch, 721 Broadway.

Due this class:
- Internet Archive Wayback Machine http://www.archive.org/web/web.php
- Readings to be announced.

Topics/activities:
- Lab work: more on web components/structures, dependencies, risks to longevity. (2 hours)
- Visit by Marisa Olson, Rhizome.org. (90 min.)

Class 10: November 20
Due this class:

- Recommended: Henry Lowood, "Shall We Play a Game: Thoughts on the Computer Game Archive of the Future." (Conference Paper, Fall 2002.) Retrieved 9/2/04 at http://www.stanford.edu/class/sts145/Library/shall_game.rtf
- Additional readings to be announced.

Topics/activities:
- Discussion of final results of Assignment #2. (40 min.)
- Production of computer animation modes of production and resulting objects/files. Various forms and principles of animation and sectors in which animation is used – feature films, games, TV, machinima, etc. (60 min.)
- Visit to animation or motion graphics studio to be announced. What can be learned from seeing how files are kept in an active production environment? What can we expect when materials come into archives? (2 hours)

Class 11: November 22 – (NYU make-up day for Oct. 9)
Due this class:
- Tate. Media Matters: Collaborating Toward the Care of Time-based Media Works of Art. London: Tate. Accessed 9/8/06 at <http://www.tate.org.uk/research/tateresearch/majorprojects/mediamatters/>. Sections to be announced.
- 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.
- Real, William A. "Toward Guidelines for Practice in the Preservation and Documentation of Technology-Based Installation Art". Journal of the American Institute for Conservation. Fall/Winter 2001. Vol. 40: No. 3.
- Messier, Paul. "Dara Birnbaum's Tiananmen Square: Break-In Transmission: A Case Study in the Examination, Documentation, and Preservation of a Video-Based Installation." Journal of the American Institute for Conservation. Fall/Winter 2001. Vol. 40: No. 3.

Suggested:
- 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>.
•	Rinehart, Richard. "A System for Formal Notation for Scoring Works of Digital and Variable Media Art". Retrieved 9/4/04 at <http://www.bampfa.berkeley.edu/about_bampfa/ avantgarde.html>.

    Topics/activities:
•	Overview of major theories, from libraries, archives, museums and independent media groups, concerning preservation of digital works. (60 min.)
•	Discussion on readings, in particular strategies for examination and documentation of installation works. (70 min.)
•	Discussion and working session for Assignment #4: Group project examining and developing recommendations for a time-based media art work in the collection of the Museum of Modern Art. Examination of paper materials and photographs of the work, and preparation of interview questions. Students will each be responsible for a piece of research for next week's class, and for a major portion of the final report to MoMA. (90 min.)

Class 12: November 27 -

Please note: We will be meeting at the Museum of Modern Art, 11 W. 53rd Street between 5th and 6th Avenues.

    Due this class:
•	Research on assigned portion of MoMA installation.
•	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. 47 – 69; 70 – 84; 92 – 107.

    Topics/activities:
•	Visit to Museum of Modern Art to examine and discuss a time-based media art installation. (4 hours)

Class 13: December 4 –
    Due this class:
•	Rothenberg, Jeff. Avoiding Technological Quicksand: Finding a Viable Technical Foundation for Digital Preservation. Washington, DC: Council on Library and Information Services. 1999. Accessed at <http://www.clir.org/pubs/reports/reports.html>.
•	Emulators Unlimited http://www.emuunlim.com/
•	Solomon R. Guggenheim Museum. "Magic Bullet or Shot in the Dark?" from transcripts of the 2004 symposium Echoes of Art: Emulation as a Preservation Strategy published on the web site of the Guggenheim Museum. 2004. Accessed 8/1/05 at
        < http://www.variablemedia.net/e/echoes/index.html>.
    Dimitrovsky, Issac. Final report, Erl-King project. On web site of the Variable Media Initiative. 2004. Accessed 8/1/05 at http://www.variablemedia.net/e/seeingdouble/ report.html.

    Topics/activities:
•	Discussion of readings on emulation as a preservation strategy. (90 min.)
•	Group work on the MoMA installation. What information has been gathered? What is needed? Where are the vulnerabilities in the work? What actions should be taken? (70 min.)
•	Other activities to be announced.

Class 14 – December 11 - Wrap-Up
<u>Due this class:</u>
Assignment #4
<u>Topics/activities:</u>
Present final plan for the MoMA installation. Presentation to an audience to be
    determined. (2 hours).
Additional activities to be announced.
Review and critique of semester's work.

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Plagiarism Advisory:

Plagiarism and other violations of the University's published policies are serious offenses and
will be punished severely. Plagiarism includes presenting or paraphrasing a phrase, sentence,
or passage of a published work (including material from the World-Wide Web) in a paper or
exam answer without quotation marks and attribution of the source, submitting your own
original work toward requirements in more than one class without the prior permission of the
instructors, submitting a paper written by someone else, submitting as your own work any
portion of a paper or research that you purchased from another person or commercial firm,
and presenting in any other way the work, ideas, data, or words of someone else without
attribution. These are punishable offenses whether intended or unintended (e.g., occurs
through poor citations or confusion about how to reference properly).

You are encouraged to read additional texts and to discuss the issues of this course and your
papers with others; but if you use ideas that come from others, you must acknowledge their
help. It is always better to err on the side of acknowledging other people than to fail to do
so.

Other offenses against academic integrity include: collaborating with others on assignments
without the express permission of the instructor, giving your work to another student to
submit as his/her own, copying answers from another student or source materials during
examinations, secreting or destroying library or reference materials. . If you have any
questions about how to cite sources, what constitutes appropriate use of a text, or other
matters of academic integrity, please discuss them with your course instructor.

Anyone caught plagiarizing will fail the course. In addition, violations of academic
integrity, including plagiarism, call for disciplinary action through the University.