GOALS: This seminar will increase students’ knowledge of primary issues and emerging strategies for the conservation and preservation of cultural heritage objects that are loosely defined as complex. Complexity can be understood as a work which is realized through the relationship of heterogeneous parts to make a whole, such as computer hardware’s relationship to software. Students will gain practical skills to assist in identification, assessment, documentation and long-term care for these complex works, with an emphasis on material with audiovisual elements and a preservation approach that focuses on the environment as well as the object. Examples of production modes/works to be studied are digital cinema, web-sites, games, interactive multimedia and complex art installations. The principles and ethics of time-based media conservation will be the main framework in which these different types of media will be explored. Students will be introduced and asked to evaluate methodologies currently used in the field and how these practices can be applied in different settings.

EXPECTATIONS: Each student will complete three assignments as outlined below. Attendance at all classes is expected unless excused; our work together will be intensive and attendance is critical to keep pace. Notify the instructor prior to class of any absences; absences for classes where work is due or presentations are scheduled will impact your final grade. Deadlines for assignments are firm and any extensions will be evaluated on a case by case status. Grades will be primarily based on assignments: File System research (20%); multimedia research (30%); and media installation project (40%). Your level of class preparedness and participation will also impact the grade (10%), as well as any unexcused absences or unexcused late work.

● Assignment #1: File Systems. Due date: 2/14/2017
  Working in pairs, student will research, document, test and (possibly) install a legacy file system. Each pair will be assigned a file system and one or more media elements for testing within that environment. Detailed description will be provided in class 2.

● Assignment #2: Multimedia research. Due date: 3/21/2017
  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 present their findings to the class in the form of a 15 minute presentation and will submit a 4-5 page display documentation report summarizing your findings. Full description will be provided in class 3.

● Assignment #3: Media Conservation Assessments at the Museum of Modern Art. Due: 5/2/2017
  Students will work in pairs to research, assess, document, and plan for the long-term conservation of works within the museum’s collection. Work will consist of thorough research on the creation and life of the artwork, on-site review and analysis of prior documentation in the museum’s records as well as the work itself, and development of questions for the artist(s). Findings will be synthesized and documented in the form of a conservation assessment, display specification and treatment plan as well as for long-term care recommendations in the form of a written report and a presentation to museum staff.

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: 17s_1805_smith_a1.doc
Restricted file naming convention: 17s_1805_smith_a1_x.doc
Where:
17s = spring 2017
1805 = class number
smith = author's last name
a1 = assignment number 1
x = restricted work designation

LOGISTICS AND ADDITIONAL RESPONSIBILITIES:

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: Refrain from using your phone during class.

Class 1: Tuesday, January 24
Topics/activities:
● Syllabus review/introduction to the course;
● Discussion of conservation ethics and practices, with a focusing on time-based media practices;
● Discussion on concept of environments and how to document them;
● In-class exercise with complex media artwork.

Class 2: Tuesday, January 31
Due this class:
Read:
  o Laue, Andrea. “How the Computer Works”
  o What Is a File System, and Why Are There So Many of Them?
  o Virtual Box: First Steps
Topics/activities:
● Discussion of readings;
● Review basic operation of computers and file-systems;
● Virtual machine review;
● Discuss assignment #1;
● Lab work on assignment #1.

Class 3: Tuesday, February 7
Guest: Eddy Colloton
Due this class:
Browse:
  o BitCurator Project
  o Forensics Toolkit
Read:
  o Lee, Christopher A., Kam Woods, Matthew Kirschenbaum, and Alexandra Chassanoff. “From Bitstreams to Heritage: Putting Digital Forensics into Practice in Collecting Institutions”.
  o Woods, Kam, Christopher A. Lee, and Simson Garfinkel. “Extending Digital Repository
Architectures to Support Disk Image Preservation and Access.”

- Evaluating Assisted Emulation for Legacy Executables
- Prael, Alice. “To Image or Copy - The Compact Disc Digital Audio Dilemma.”
- Duryes, Alexander, “An Introduction to Optical Media Preservation.”
- Dicks, Christopher. “Computer Hard Disks and Diskettes.”
- Owens, Trevor. “The is of the Digital Object and the is of the Artifact”

Topics/activities:
- Review of project #1 progress;
- Disk Imaging part 1;
- Review of disk imaging concepts;
- In class exercises exploring and making disk imaging;
- Lab work – disk imaging/project #1;
- Project #2 review and discussion.

Class 4: Tuesday, February 14
PROJECT #1 DUE
Guest: Don Mennerich, Digital Archivist, NYU Digital Libraries
Due this class:
- View:
  - Mennerich, Don Managing Born Digital Archives: New Tools and Approaches
- Read:
  - Integrating Digital Forensics Techniques into Curatorial Tasks: A Case Study
  - Kirschenbaum, Matthew G. (2004). “So the Colors Cover the Wires”
- Recommended (historical text)
  - (updated with correct link) Jimenez, Mona. Interactive multimedia on CD-ROM: experiments with risk assessment

Topics:
- Institutional workflows for managing, preserving and providing access to born digital acquisitions using digital forensics: NYU Digital Library;
- Further disk imaging lab work;
- Project #2 lab work.

Class 5: Tuesday, February 21
Guest: Don Mennerich, Digital Archivist, NYU Digital Libraries
Due this class:
- Browse:
  - Rhizome Arbase
  - Web sites captured with Webrecorder
  - Archive-It
  - Theresa Duncan CD-ROMs Project
  - Old web today
- Read:
  - von Suchodoletz, Dirk and Rechert, Klaus. Emulation as a Service: Framework for Curation and
Rendering of Complex Media Objects
- Insert Web Recorder Reading
- Dianne Dietrich, Julia Kim, Morgan McKeehan, and Alison Rhonemus. How to Party Like it’s 1999: Emulation for Everyone
- Scott, J. The Emularity
- Espenschied, D. Authenticity/Access

Topics:
- Discussion of emulation concepts and various application;
- Emulation through web interfaces;
- Theories and projects concerning the archiving and preservation of historical and contemporary web sites;
- Institutional workflows for managing, preserving and providing access to born digital acquisitions using digital forensics: NYU Digital Library;
- Continue lab work on Assignment #2

Class 6: Tuesday, February 28
- Read:
  - Frank, Allegra (2015), “Video Game Archivists Celebrate New Victory in Preservation of Abandoned Games (Update)” in Polygon
- Browse:
  - How They Got Game, Stanford University
- Recommended (as resources/historical piece)
  - Henry Lowood, "Playing History with Games: Steps towards Historical Archives of Computer Gaming,"
  - Grand Text Auto
- Emulators Unlimited http://www.emuunlim.com/

Topics/Activities:
- Discussion of emulation concepts and various application;
- Emulation through web interfaces;
- Theories and projects concerning the archiving and preservation of historical and contemporary web sites;
- Interactive preservation concepts and practice;
- Video Games history and emerging archival practices;
- In-class exercise and discussion on video game preservation, drawing on concepts discussed previously (disk images, emulators, dependencies).

Class 7: Tuesday, March 7
Due this class:
- View: Forging the Future Project
- Review Matters in Media Art
- Review Variable Media Questionnaire
- Read:
  - Laurenson, Pip. *Authenticity, Change and Loss in the Conservation of Time-Based Media Installations*.
  - Reigl, A. *The Modern Cult of Monuments: Its Essence and Its Development*.

**Topics/activities:**
- Fundamentals of Media Conservation;
- Presentation on the history of time-based media in fine art and collecting institutions;
- Discussion of case-study and work to be done.

**NO CLASS Tuesday March 14 – SPRING BREAK**

**Class 8: Tuesday, March 21**

**PROJECT 2 DUE**
- Due this class:
  - Project #2 Presentations

**Topics/activities:**
- Project #2 Presentations
- Discussion

**Class 9: Tuesday, March 28**
- Browse: *The Artist Documentation Project website*
- Read: READING ON ARTISTS INTERVIEWS
- Re-familiarize yourself with the forms previously provided from the “Matters in Media Art” site.
- See also the *Inside Installations* web site
- The Hirshhorn Artist Interview Program: Capturing the Contemporary
  - http://www.voca.network/blog/2013/11/20/the-hirshhorn-artist-interview-program/

**Topics/activities:**
- Discussion of MoMA institutional practice and documentation;
- Discuss artist interview methodology and practice;
- Develop questions for artist interview;
- Discussion of Project 3 and assignment of works.

**Class 10: Tuesday, April 4**

**Guest Speaker: Dan Finn**
Due this class:


Topics/activities:

- Discussion of different collecting museums’ practice.
- Discuss display equipment for time-based media works;
- Hands on exercises with film/slide projectors and CRT monitors.

Class 11: Tuesday, April 12 - at MoMA
25W 53rd st

Topics/activities:

- Conduct artist’s Interview;
- Group work on Project #3 installations.

Class 12: Wednesday 9:30 - 12:30, April 19 - CLASS MEETS AT MoMA QNS. Note Time Change.
Examination of artist’s work at MoMA.

Due this class:
- TBD

Topics/activities:

- Continue work on Project #3. Meeting either at MoMA or NYU, TBD.

Class 13: Tuesday, April 25
PROJECT #3 DUE

Due this class:
- Present final report to MoMA staff.
- Discussion about areas of further investigation by the museum.

Class 14: Tuesday, 5/2

Due this class:
- Readings may be assigned as needed

Topics/activities:

- Wrap-up on concepts and methodologies;
- Open discussion;
- TBD by class.

Exhibitions Worth Seeing:

Dreamlands @ The Whitney - closes 2/5/2017
Cory Arcangel and Olia Lialina: Asymmetrical Response @ The Kitchen - closes 2/15/2017
Mark Leckey: Containers and Their Drivers @ MoMA PS1 - closes 3/5/2017
Tales of our Time: Contemporary Chinese Art @ Guggenheim - closes 3/10/2017
Arthur Jafa - Love is the Message, The Message is Death @ Gavin Brown Enterprise - closes 1/28/2017
Lynn Hershman Leeson - Remote Controls @ Bridget Donohue Gallery closes 3/12/2017

NYCDH Stuff
New Reality Conference @ New Museum - 2/25/2017
Digital Social Memory Panel @ New Museum - 2/4/2017