**CINE-GT 1805 Instructors:****Eddy Colloton (he/his)**elc401@nyu.edu

309-830-3306

Office hours by appointment

Please call or email to schedule

Caroline Gil Rodríguez (she/her)cmg623@nyu.edu

787-530-5823

Office hours by appointment

Please call or email to schedule

Course Description

This seminar will increase students' knowledge of primary issues and emerging strategies for the preservation of time-based media works that go beyond single channels/screens. 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 existing in networks.

Examples of production modes/works to be studied are microcontroller-based works, animations (individual works and motion graphics) web sites, games, interactive multimedia (i.e., educational/artist CDROMs), and technology-dependent 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 and will be actively engaged in developing new strategies for their care and preservation. Digital archivists, artists/producers, museum conservators, collection managers, and others with expertise in the above will provide a wide range of perspectives in a series of guest lectures.

Expectations

- Attend class each week, arrive on time, and stay for the entire class period
- Complete required readings each week in order to be prepared for class exercises and discussions

- Participate in hands-on lab work and cooperate with fellow students
- Complete both assignments, meet deadlines, and produce excellent work

Attendance & Participation

Students are expected to attend all classes and labs. If you might miss more than two classes during the semester, please consider enrolling in the course at another time.

Punctuality, attendance, and participation are expected of every student. Absences must be discussed with the instructors prior to missing class. Unexcused absences, lateness, or leaving class early will affect your grade. Class sessions will include a mix of lecture, discussion, demonstrations, and group or individual lab exercises. Your participation in these in class activities is a required part of your grade. You will be graded on your ability to collaborate with others during class and for group assignments. Many in-class exercises and homework assignments will require a computer. Laptops are required for in-class labs, so please bring your computer to class (see syllabus for details). Please inform the instructor if you regularly cannot bring a laptop so that arrangements can be made.

Grading

- 1) attendance and punctuality (15%)
- 2) participation (25%) – engage in discussion, conduct lab work, assist fellow students
- 3) first assignment (25%)
- 4) final project (35%)

No late assignments will be accepted except under extraordinary circumstances. Approval for an extension and/or an Incomplete grade must be sought PRIOR to associated due dates.

Learning Objectives

At the conclusion of this course, students should:

- Understand concepts of digital forensics and be able to use forensic acquisition techniques (i.e., write blockers) to safely copy content from digital carries such as external hard drives, floppy disks, removable flash storage devices (such as SD cards and USB drives), optical media, and computers.
- Understand and be able to use BitCurator and other tools employed in digital forensic acquisition workflows.
- Understand how computers work and be able to identify and account for hardware and software dependencies of digital media projects during preservation planning.
- Understand disk imaging procedures and different types of disk images, and be able to create, document, and access disk images.

- Understand emulation concepts and tools, including emulation-as-a-service (Eaas), and be able to install and run emulators (e.g., VirtualBox, Basilisk, Sheepshaver, etc) purposefully to realize access and/or exhibition objectives for software-based digital media projects.
- Understand software development workflows and tools including GitHub and its use in software creation as well as preservation.
- Understand conservation methodology and ethics, especially as they apply to digital media projects and artworks including those with sound elements, multi-channel video installations, multimedia sculpture, websites, and interactive artworks.
- Understand the unique context of the artist's studio and archive, and the special considerations and challenges of this context for archivists and conservators.
- Understand digital film production workflows and born-digital elements, and be able to identify and plan for the preservation of various digital film formats including DCP and DPX.
- Possess basic knowledge of preservation strategies and risks of digital media projects on complex platforms, including websites, podcasts, VR/AR environments, social media, etc. and the landscape of rapidly developing resources emerging to address these preservation needs.
- Understand how strategic, collaborative initiatives have been developed in the past to address preservation and conservation challenges too complex for individual effort alone to resolve, and possess basic knowledge of how to initiate the formation of such an initiative.

Course Texts

All readings are available electronically and linked through this syllabus. If you have any issues accessing readings, please contact Caroline or Eddy ASAP.

NYU/TISCH POLICIES

Tisch Policy on Academic Integrity

The core of the educational experience at the Tisch School of the Arts is the creation of original work by students for the critical review of faculty members. Any attempt to evade that essential transaction through plagiarism or cheating is educationally self-defeating and a grave violation of Tisch's community standards. Plagiarism is presenting someone else's original work as if it were your own; cheating is an attempt to deceive a faculty member into believing that your mastery of a subject or discipline is greater than it really is. Penalties for violations of Tisch's Academic Integrity Policy may range from being required to redo an assignment to dismissal from the School. For more information on the policy--including academic integrity resources, investigation procedures, and penalties--please refer to the [Policies and Procedures Handbook](https://www.tisch.nyu.edu/student-affairs/important-resources/tisch-policies-and-handbooks) ([tisch.nyu.edu/student-affairs/important-resources/tisch-policies-and-handbooks](https://www.tisch.nyu.edu/student-affairs/important-resources/tisch-policies-and-handbooks)) on the website of the Tisch Office of Student Affairs.

Health & Wellness Resources

Your health and safety are a priority at NYU. If you experience any health or mental health issues during this course, we encourage you to utilize the support services of the 24/7 NYU Wellness Exchange 212-443-9999. Also, all students who may require an academic accommodation due to a qualified disability, physical or mental, please register with the Moses Center 212-998-4980. Please let your instructor know if you need help connecting to these resources. Students may also contact MIAP Director Juana Suárez (juana@nyu.edu) and/or Academic Program Manager, Jess Cayer (jess.cayer@nyu.edu) for help connecting to resources.

Sexual Misconduct, Relationship Violence, and Stalking Policy & Reporting Procedures

NYU seeks to maintain a safe learning, living, and working environment. To that end, sexual misconduct, including sexual or gender-based harassment, sexual assault, and sexual exploitation, are prohibited. Relationship violence, stalking, and retaliation against an individual for making a good faith report of sexual misconduct are also prohibited. These prohibited forms of conduct are emotionally and physically traumatic and a violation of one's rights. They are unlawful, undermine the character and purpose of NYU, and will not be tolerated. A student or employee determined by NYU to have committed an act of prohibited conduct is subject to disciplinary action, up to and including separation from NYU. Students are encouraged to consult the online [Sexual Misconduct, Relationship Violence, and Stalking Resource Guide for Students](https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/sexual-misconduct--relationship-violence--and-stalking-resource-.html)

([nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/sexual-misconduct--relationship-violence--and-stalking-resource-.html](https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/sexual-misconduct--relationship-violence--and-stalking-resource-.html)) for detailed information about on-campus and community support services, resources, and reporting procedures. Students are also welcome to report any concerns to MIAP Director Juana Suárez (juana@nyu.edu) and/or Academic Program Manager, Jess Cayer (jess.cayer@nyu.edu).

NYU Title IX Policy

Tisch School of the Arts is dedicated to providing its students with a learning environment that is rigorous, respectful, supportive and nurturing so that they can engage in the free exchange of ideas and commit themselves fully to the study of their discipline. To that end Tisch is committed to enforcing University policies prohibiting all forms of sexual misconduct as well as discrimination on the basis of sex and gender. Detailed information regarding these policies and the resources that are available to students through the Title IX office can be found by using [this link. https://www.nyu.edu/about/policies-guidelines-compliance/equal-opportunity/title9.html](https://www.nyu.edu/about/policies-guidelines-compliance/equal-opportunity/title9.html)

Non-Discrimination and Anti-Harassment Policy & Reporting Procedures

NYU is committed to equal treatment and opportunity for its students and to maintaining an environment that is free of bias, prejudice, discrimination, and harassment. Prohibited discrimination includes adverse treatment of any student based on race, gender and/or gender

identity or expression, color, religion, age, national origin, ethnicity, disability, veteran or military status, sexual orientation, marital status, or citizenship status, rather than on the basis of his/her individual merit. Prohibited harassment is unwelcome verbal or physical conduct based on race, gender and/or gender identity or expression, color, religion, age, national origin, ethnicity, disability, veteran or military status, sexual orientation, marital status, or citizenship status. Prohibited discrimination and harassment undermine the character and purpose of NYU and may violate the law. They will not be tolerated. NYU strongly encourages members of the University Community who have been victims of prohibited discrimination or prohibited harassment to report the conduct. MIAP students may make such reports to MIAP Director Juana Suárez (juana@nyu.edu) and/or Academic Program Manager, Jess Cayer (jess.cayer@nyu.edu), or directly to Marc Wais, Senior Vice President for Student Affairs. Students should refer to the University's [Non-Discrimination and Anti-Harassment Policy and Complaint Procedures](#) (nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/non-discrimination-and-anti-harassment-policy-and-complaint-proc.html) for detailed information about on-campus and community support services, resources, and reporting procedures.

NYU Guidelines for Compliance with the Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act of 1974 (FERPA) was enacted to protect the privacy of students' education records, to establish the rights of students to inspect and review their education records, and to provide students with an opportunity to have inaccurate or misleading information in their education records corrected. In general, personally identifiable information from a student's education records, including grades, may not be shared without a student's written consent. However, such consent is not needed for disclosure of such information between school officials with legitimate educational interests, which includes any University employee acting within the scope of their University employment. See [here](#) (nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/FERPA.html) for full policy guidelines.

NYU Student Religious Observance Policy

See [here](#) for the University Calendar Policy on Religious Holidays.

NYU Academic Support Services

NYU offers a wide range of academic support services to help students with research, writing, study skills, learning disability accommodation, and more. Here is a brief summary:

NYU Libraries

Main Site: library.nyu.edu; Ask A Librarian: library.nyu.edu/ask

70 Washington Square S, New York, NY 10012

Staff at NYU Libraries has prepared a guide (<http://guides.nyu.edu/c.php?g=276579&p=1844806>) covering services and resources of particular relevance to graduate students. These include research services and guides by topic area, subject specialists, library classes, individual consultations, data services, and more. There's also a range of study spaces, collaborative work spaces, and media rooms at Bobst, the library's main branch.

The Writing Center

nyu.mywconline.com

411 Lafayette, 4th Floor, 212-998-8860, writingcenter@nyu.edu

The Writing Center is open to all NYU students. There, students can meet with a faculty writing consultant or a senior peer tutor at any stage of the writing process, about any piece of writing (except exams). Appointments can be scheduled online. Students for whom English is a second language can get additional help with their writing through a monthly workshop series scheduled by the Writing Center (cas.nyu.edu/content/nyu-as/cas/ewp/writing-resources/rise-workshops.html).

The University Learning Center (ULC)

nyu.edu/ulc

Academic Resource Center (18 Washington Pl, 212-998-8085) or University Hall (110 East 14th St, 212-998-9047)

Peer Writing Support: All students may request peer support on their writing during drop-in tutoring hours for "Writing the Essay / General Writing" at the University Learning Center (ULC), which has two locations noted above. Students for whom English is a second language may wish to utilize drop-in tutoring geared towards international student writers (see schedule for "International Writing Workshop").

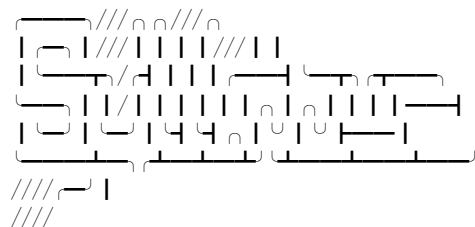
Academic Skills Workshops: The ULC's Lunchtime Learning Series: Academic Skills Workshops focus on building general skills to help students succeed at NYU. Skills covered can help with work in a variety of courses. Workshops are kept small and discuss topics include proofreading, close reading to develop a thesis, study strategies, and more. All Lunchtime Learning Series workshops are run by Peer Academic Coaches.

Moses Center for Students with Disabilities

nyu.edu/students/communities-and-groups/students-with-disabilities.html

726 Broadway, 3rd Floor, 212-998-4980, mosescsd@nyu.edu

All students who may require an academic accommodation due to a qualified disability, physical or mental, are encouraged to register with the Moses Center. The Moses Center's mission is to facilitate equal access to programs and services for students with disabilities and to foster independent decision making skills necessary for personal and academic success. The Moses Center determines qualified disability status and assists students in obtaining appropriate accommodations and services. To obtain a reasonable accommodation, students must register with the Moses Center (visit the Moses Center website for instructions).



01 Introduction to Handling Complex Media

February 2, Tue 5:30pm – 9:30pm

[Zoom link](#)

Topics

Introductions, syllabus review, course format and goals

What is complex media?

Creating a [Preservation Plan](#) for: **Grahame Weinbren and Roberta Friedman, The Erl King (1982-1985)**

Artwork details:

-[The Erl King- Daniel Langlois Foundation](#)

-[The Erl King- Roberta Friedman's Website](#)

Prior restorations: Skim these readings and create a preservation plan to present during class. What would you do differently? How would you propose to update this work?

-Jones: [Seeing Double](#), Emulation in Theory and Practice, 2004

-Rothenberg: [Renewing the Erl King](#) 2006

-Dimitrovsky: [Final Report Erl King Project, 2004](#)

Optional Readings

Oleksik: [Janet Cardiff and George Bures Miller's The Killing Machine](#)

For fun (!): [DeMarinis, Paul: Erased Dots and Rotten Dashes, or How to Wire Your Head for a Preservation](#)

Lab

Analyze complex media object & create preservation plan

Discuss and present preservation plan

02 Virtualization

February 9, Tue 5:30pm – 9:30pm

[Zoom link](#)

Topics

Introduction to Virtualization and Emulation

Discuss [Midterm Assignment](#)

Readings

Rothenberg: [The Emulation Solution. Avoiding Technological Quicksand](#) (1998) [SECTION 7 & 8 ONLY]

McKeehan, Dietrich, Kim, Rhonemus: [How to Party Like it's 1999: Emulation for Everyone](#)

Rechert, Falcao, Ensom: [Introduction to an emulation-based preservation strategy for software-based artworks](#) (*Executive Summary and Introduction only*, skim report)

Tour the [Virtual Desktop \(online emulator\)](#)

[Fino-Radin: Art in the Age of Obsolescence](#)

Recommended

Espenschied: [Emulating Bomb Iraq](#) (N.D.)

Granger: [Emulation as a Digital Preservation Strategy](#) (2000)

Rothenberg: [The Emulation Solution. Avoiding Technological Quicksand](#) (1998) [FULL DOCUMENT]

Rosenthal: [Emulation & Virtualization as Preservation Strategies](#) (2015)

Reference

Krzyzanowski: [Rutgers Department of Computer Science History of Operating Systems](#)

Lab

Introduction to **VirtualBox**

[Mount CD-ROM ISO in VirtualBox // Windows 95](#)

[Download Oregon Trail ISO](#)

[Internet Archive CD-ROM Software Library](#)

****Download Virtual Box before class****

03 Digital Forensics: BitCurator & Disk Imaging

Feb 16, Tue 5:30pm – 9:30pm

[Zoom link](#)

Topics

Forensics: Basic concepts and usage for investigation and preservation

Forensic disk imaging for archiving and preservation: Computer hard drives, optical media, floppy disks

Readings

Digital Preservation Coalition: [Digital Preservation Handbook – Digital Forensics](#)

Lee, Woods & Garfinkel: [Extending Digital Repository Architectures to Support Disk Image Preservation and Access](#)

[Peltzman & Waugh: The Archivist's Guide to KryoFlux: An Unofficial Manual](#)

[The Archivist's Guide to KryoFlux](#) (Read pages 1–6, review/skim remainder of the guide)

Resources

- [BitCurator Edu Resources:](#)
 - [BitCuratorEdu tool inventory](#)
 - [BitCuratorEdu Bibliography](#)
 - [Creating a Disk Image Using Guymager](#)
 - [Curating Potentially Sensitive Information in Digital Collections](#)

Lyons, Bertram, [Disk Image Content Model and Metadata Analysis](#), Harvard Libraries, [October 21, 2016](#)

MoMA Media Conservation Initiative, December 7-8, 2017, [Disk Imaging Resources](#),

Recommended

Rechert et al: [Characterization of CD-ROMs for Emulation-based Access](#)

Valizada et al: [Cloudy Emulation – Efficient and Scalable Emulation-based Services](#)

Task Force on Technical Approaches for Email Archives: [Exploring Email Emulation](#)

Cochrane: [Designing a Universal Virtual Interactor \(UVI\) for digital objects](#)

Schweikert: [An Optical Media Preservation Strategy for New York University's Fales Library & Special Collections](#)

Prael: [To Image or Copy -The Compact Disc Digital Audio Dilemma](#)

Lab

Explore the BitCurator Environment

[Disk Imaging using Guymager software](#)

[Add CD-ROM drive \(physical\) or ISO disk image \(virtual\) to VirtualBox](#)

[Access disk image data using BitCurator Disk Image Access](#) (export files from disk image)

****Have Virtual Box on your machine and download [BitCurator](#) before class****

****Students pick up Raspberry Pi kits Monday****

04 Electronics and Microcontrollers

February 23, Tue 5:30pm – 9:30pm

[Zoom link](#)

Guest Lecturer: Sasha Arden, Institute of Fine Arts

Topics

Introduction to Microcontrollers and the Raspberry Pi

Use of Microcontrollers in Conservation, Introduction to the Arduino

Readings

Banzi: [How Arduino is open-sourcing imagination](#) (video)

ExplainingComputers: [Raspberry Pi 3 Model B+](#) (video)

Kwok: [Field Instruments: Build it yourself](#)

Badami: [A tour of the Arduino UNO board](#)

Recommended

CodeNewbie: [What is open source hardware?](#) (podcast audio)

Lab- **TBD**

1. Raspberry Pi with DHT11 Temperature/Humidity Sensor

[DHT11 Wiring Diagram](#)

[Download, install, and run Adafruit's DHT11 sensor software](#)

2. Raspberry Pi Camera Module Setup

[Installation & use of the CSI Mini Camera Module](#)

****Due: Project Proposal, Friday, February 26th****

05 Developing Workflows

March 2nd, Tue 5:30pm – 9:30pm

[Zoom link](#)

Topics

Infrastructure and Storage - When and where does documentation happen?

Microservices

Github- workflow repositories and issue tracking

Readings

[Handel, Dinah: Media microservices and archival workflows at CUNY TV](#)

Chassanoff and Post: [OSSArcFlow Guide to Documenting Born-Digital Archival Workflows](#)

Recommended

[Open workflows at amia-opensource Github](#)

[Media Microservices](#) at CUNY

[NYPL AMI workflows](#)

[Cool Tools SI](#) Time Based Media Art

[Barrera-Gómez; Erway: Walk this Way: Detailed Steps for Transferring Born-Digital Content from Media](#)

Lab

Workflow modeling lesson and sticky notes exercise

Open Lab Time for Assignment One

06 Emulation as a Service

March 9, Tue 5:30pm – 9:30pm

[Zoom link](#)

Guest Lecturer: Ethan Gates, Software Preservation Analyst at Yale Libraries

Topics

Class discussion: From Bitstreams to Heritage & the BitCurator Environment

Using emulation in archives and repositories

Computing environments and Virtual Box

Readings

Cochrane, et al.: [Towards a Universal Virtual Interactor \(UVI\) for Digital Objects](#)

Gates: [Classroom Access to Interactive DVDs](#)

Scott: [A Second Christmas Morning: The Console Living Room](#)

Recommended/Resources

Gates: [emulation-resources repository](#)

Internet Archive: [Tour the Console Living Room](#)

RHIZOME: [The Theresa Duncan CD-ROMs](#)

CMSI, ARL: [Code of Best Practices in Fair Use for Software Preservation](#)

Lab

Open Lab Time to discuss Midterm Assignment

****TBD Raspberry Pi Round 2 lab****

07 Immersive Media & Virtual Reality

March 16, Tue 5:30pm – 9:30pm

[Zoom link](#)

Guest Lecturer: Savannah Campbell, Media Preservation Specialist, Whitney Museum of American Art

Topics

Immersive Media and VR formats and their preservation/management

Readings

[Preserving Immersive Media, Tate](#)

Ensom & McConchie: [Preserving Virtual Reality Artworks: White Paper](#)

Arden: [From Immersion to Acquisition: An Overview of Virtual Reality for Time-Based Media Conservators](#)

Recommended

[PIMG Videos on YouTube- dancer's choice](#) (select one and review for the group)

Campbell: [A Rift in Our practices? Toward Preserving Virtual Reality](#)

Lab

Open Lab Time for Midterm Assignment

SPRING RECESS DAY

March 19- Spring Recess Day

08 Midterm Presentations

March 23, Tue 5:30pm – 9:30pm

[Zoom link](#)

Students give presentations for Assignment One

[Due: Midterm Assignment, Friday, March 26th](#)

MIAP THESIS WEEK

Monday March 29 to Friday April 2

09 HCM in Museums I: Installation Art

March 30, Tue 5:30pm – 9:30pm

[Zoom link](#)

Topics

Handling Complex Media in Museums

Artist Interviews

Readings

Laurenson: [Authenticity, Change and Loss in the Conservation of Time-based Media Installations](#)

Oleksik: [Rewind: A Brief History of Caring for Video Art in the United States](#)

Lozano-Hemmer: [Best practices for conservation of media art from an artist's perspective with video or audio only](#)

Sterett and Candida Smith: [Looking Back: The Origins of VoCA and the Artist Interview Workshops](#) [VIDEO]

[Starting an Artist Interview Program: Hard-Earned Lessons and Best Practices](#)

Recommended

Bishop: [Evolving Exemplary Pluralism](#)

Fino-Radin: [The Nuts and Bolts of Handling Digital Art](#)

Phillips: [Implementing Time-based Media Conservation in Museum Practice](#)

Brost: [A Documentation Framework for Sound in Time-based Media Installation Art](#)

Roeck: [Preservation of digital video artworks in a museum context](#)

van Saaze et al: [Adaptive Institutional Change: Managing Digital Works at the Museum of Modern Art](#)

Matters in Media Art website: www.mattersinmediaart.org

Resources

The Met Museum Time-Based Media Working Group: [Sample Documentation and Templates](#) [Especially - Artist Questionnaires]

Lab

Open Lab Time for Final Assignment

10 Artist's Archive and Video Distribution Networks

April 6, Tue 5:30pm – 9:30pm

[Zoom link](#)

Guest Speaker: Jon Dieringer, Electronic Arts Intermix (EAI)

Topics

Media Art distributors and Artist's Archive

Readings

EAI: [Artist Description: Bill Viola](#)

Laurenson: [The Management of Display Equipment in Time-based Media Installations](#)

Recommended

[EAI resource guide](#)

[David Wojnarowicz Knowledge Base](#) (Especially “The Database Challenge”)

Lozano-Hemmer: [Level of Confidence](#)

[Joan Mitchell Foundation: Create a Living Legacy program resources](#)

[Blank Forms: Maryanne Amacher Foundation](#)

Lab

Open Lab Time for Final Assignment

11 HCM in Museums II & Discussion of Conservation Ethics

April 13, Tue 5:30pm – 9:30pm

[Zoom link](#)

Guest Speaker: Kate Lewis, Chief Conservator at MoMA

Topics

Handling Complex Media in Museums

Conservation Ethics

Readings

AIC [Code of Ethics and Guidelines for Practice](#)

V&A [Ethics Checklist](#)

Richmond: [The Ethics Checklist - 10 Years On](#)

Ashley-Smith: [A Role for Bespoke Codes of Ethics](#)

SAA [Core Values Statement and Code of Ethics](#)

Foundation for the Conservation of Modern Art: [The Decision-Making model for the Conservation and Restoration of Modern and Contemporary Art](#)

Recommended

[Mellon Conservation Initiative](#)

MoMA-Mellon Media Conservation Initiative

[The Acquisition Process - Getting Started](#)

[The Acquisition Process - video](#)

Lab

Open Lab Time for Final Assignment

SPRING RECESS DAY

April 19- Spring Recess Day

12 Digital Film

April 20, Tue 5:30pm – 9:30pm

[Zoom Link](#)

Guest Speaker: Peter Oleksik, Assistant Media Conservator at MoMA

Topics

Digital Film

Readings

[FADGI: Digitizing Motion Picture Film: Exploration of the Issues and Sample SOW](#)

Digital Dilemma [No.1](#) (Sections 5 & 6)

Digital Dilemma [No.2](#) (Progress report, Section 5)

Recommended

Sterne & Mulvin: [The Low Acuity for Blue: Perceptual Technics and American Color Television](#)

For Review

[NETFLIX Specifications and Guides](#) - especially Production/Post-production

[NETFLIX Technology Resources](#) - especially IMF Tools & Assisted QC Tools

[Digital Cinema Initiatives Current Spec](#) - look over the sections of DSM, DCDM and DCP

[Academy Color Encoding System](#)

[Embedding Metadata in DPX Files FADGI Report](#)

Lab

Open Lab Time for Final Assignment

13 Software-Based Art

TBD

[Zoom Link](#)

Guest Speaker: Patricia Falcão, Time-based Media Conservation, Tate

Topics

Software-Based Art, Web-based artworks

Readings

Falcao, Ensom: [Conserving Digital Art](#)

Engel & Phillips (2019) : [Applying conservation ethics to the examination and treatment of software- and computer-based art](#)

Recommended

Lialina & Lurk: [Owning Online Art: Selling and Collecting Netbased Artworks](#)

Scott: [The Hidden Shifting Lens of Browsers](#)

Fino-Radin: [Digital Preservation Practices and the Rhizome Artbase](#)

Engel & Wharton: [Source code documentation as a conservation strategy for software-based art](#)

Guggenheim Blog: How the Guggenheim & NYU are conserving computer-based art

[Part I](#)

[Part II](#)

Case studies

[Walker Art Center- Piotr Szyhalski's *Ding an Sich*](#)

[Cooper Hewitt- Planetary: collecting and preserving code as a living object](#)

[Victoria and Albert Museum- WeChat](#)

Lab

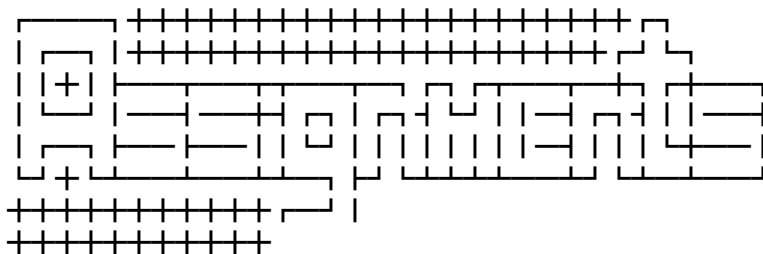
Open Lab Time for Final Assignment

14 Last Class: Student Presentations

May 4, Tue 5:30pm – 9:30pm

[Zoom link](#)

[Due: Final Project, Friday, May 7th](#)



Over the course of the semester, students will complete two assignments based on a single, ongoing project. Students will break up into teams of two or three, choose a project, conduct related work, and turn in a Midterm Assignment and completed Preservation Plan for the Final Assignment.

Students will work in groups to create a preservation plan for one of the following:

1. An interactive CD-ROM
2. A microcontroller-based object
3. A complex media object

Each group must submit a proposal for the object they choose. Once your group's proposal has been approved, you may not change your project.

In groups of two or three, choose an object type from the list above. If your object does not exist yet, build it. Interact with the object using contemporary tools and operating systems, emulation/virtualization, and/or legacy hardware and software in the Old Media Lab if applicable. Observe functionality and presentation of the object using hardware and software render methods and document your findings. Report successes and failures from hands-on lab work and make recommendations for preservation in the form of a written Preservation Plan. Document your process, preservation descriptive information and successes and failures along the way. Your Preservation Plan should include each of the sections below (as applicable to the object you choose):

Midterm Assignment

For the Midterm Assignment, each group will submit the first five sections of their Preservation Plan document (Introduction, Description, Context & Historical Information, and Creator's Intent). Each group will give a "Midterm Update" presentation on the status of their ongoing project and discuss their work with the class.

February 26th, Friday – Project proposal due

March 23rd, Tuesday – In-class "Midterm Update" presentations

March 26, Friday – Assignment one paper due

- **Introduction** – Introduce your preservation plan and goals in creating it.
 - **Description** – Write a basic description of the media object. What it is and how is it used?
 - **Context & Historical Information** – Document background and history information to contextualize the object
 - **Creator's Intent** – If possible, seek out descriptions of the creator's intent. This might include interviews with the artist, developer or creator of the media object to determine the intention behind its creation, functionality, and presentation. Gather any secondary source information and/or make determinations based on your understanding of the object.
 - **Preliminary User Experience & Behavior Report** – Describe your preliminary findings when using your media object. How do users interact with or observe it? Document behavior or dynamic operations (movement, functionality, clicks, roll-overs, etc.) of the object that impact presentation. Consider whether expectations of current users align with interactive conventions of your object.
-

Final Assignment

May 4th, Tuesday – In-class presentations

May 7th, Friday – Final project due

Assignment Two is a continuation of the Preservation Plan. Please include the five sections (above) from Assignment One, as well as the following ten sections (below) in your final Preservation Plan.

- **Computing Environment** – Document the original (or recommended) computing environment/platform. Include information about what software and hardware were originally recommended for use with your object.
- **File Analysis & Forensics** – Document relevant file identification and validation/conformance information, including which formats are present and their technical specifications. Include disk usage/data size reports. Perform conformance/validation checks and describe your findings. Report any information gleaned from forensic analysis.
- **Final User Experience & Behavior Report** – Complete your documentation describing user experience, including behavior, functionality, dynamic operations, and fulfillment of user expectations.
- **Relationships & Dependencies** – Document any relationships and/or dependencies required for the object to function, including any applicable versioning information for associated hardware and software. Please note whether software installers or dependencies are available for your object, as well as any versioning information.

- **Disk Imaging & Forensics (if applicable)** – Report any information gleaned from forensic analysis (other than environment and tech specs). If a forensic disk image does not yet exist, create one, document relevant file identification information and processes and software used to create the image.
 - **Render Method: Emulation and/or Legacy Hardware** – If you created an emulated version of the object, document your process.
 - **Renderability** – Once you are able to view the media object using emulation and/or legacy hardware/software, describe the experience and degree of success. If you viewed the media object using both rendering methods (emulation and legacy hardware/software), compare them.
 - **Challenges & Recommendations** – Create an account of your experience rendering your object, list challenges you faced, and create a list of recommendations for successful playback based on your experience. What is the optimal rendering setup for this object?
 - **Physical Preservation** – Make recommendations for physical preservation of each part of your object and provide condition information.
 - **Conclusion** – What are some general takeaways from this exercise? What is your impression of the degree of future success in viewing and interacting with this media object?
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Elements of a Preservation Plan

- **Introduction** – Introduce your preservation plan and goals in creating it.
- **Description** – Write a basic description of the media object. What it is and how is it used?
- **Context & Historical Information** – Document background and history information to contextualize the object
- **Creator's Intent** – If possible, seek out descriptions of the creator's intent. This might include interviews the artist, developer or creator of the media object to determine the intention behind its creation, functionality, and presentation. Gather any secondary source information and/or make determinations based on your understanding of the object.
- **User Experience & Behavior** – Describe the user experience. How do users interact with or observe the media object? Detail any behaviors or dynamic operations (clicks, roll-overs, etc.) of the object that impact presentation. Consider whether expectations of current users align with interactive conventions of your object.
- **Computing Environment** – Document the original (or recommended) computing environment/platform. Include information about what software and hardware were originally recommended for use with your object.

- **File Analysis & Forensics** – Document relevant file identification and validation/conformance information, including which formats are present and their technical specifications. Include disk usage/data size reports. Perform conformance/validation checks and describe your findings. Report any information gleaned from forensic analysis.
- **Relationships & Dependencies** – Document any relationships and/or dependencies required for the object to function, including any applicable versioning information for associated hardware and software. Please note whether software installers or dependencies are available for your object, as well as any versioning information.
- **Disk Imaging (if applicable)** – If a forensic disk image does not yet exist, create one and document the process you used to create the image.
- **Render Method: Emulation and/or Legacy Hardware** – If you created an emulated version of the object, document your process.
- **Renderability** – Once you are able to view the media object using emulation and/or legacy hardware/software, describe the experience and degree of success. If you viewed the media object using both rendering methods (emulation and legacy hardware/software), compare them.
- **Preservation Packaging** – Create a preservation package for any data associated with your object. Describe the package and its contents (file index/manifest, fixity checks, file format analysis, file transfer logs, etc.). Feel free to use the BagIt packaging format if appropriate.
- **Physical Preservation** – Make recommendations for physical preservation of each part of your object and provide condition information.
- **Challenges & Recommendations** – Create an account of your experience rendering your object, list challenges you faced, and create a list of recommendations for successful playback based on your experience. What is the optimal rendering setup for this object?
- **Conclusion** – What are some general takeaways from this exercise? What is your impression of the degree of future success in viewing and interacting with this media object?