

HANDLING COMPLEX MEDIA

[HOME](#)[ABOUT](#)[2020 SYLLABUS](#)[ASSIGNMENTS](#)[PRESERVATION PLAN](#)

01

Introduction to Handling Complex Media

January 28, Tue 5:30pm – 9:30pm

721 Broadway, Room 652

Topics

Introductions, syllabus review, course format and goals

Creating a [Preservation Plan](#)

Video and discussion: Preservation Plan for the [The Furbee Organ](#)

Optional Readings

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

Lab

Analyze Complex Media Object & create Preservation Plan

Present Preservation Plan for Complex Media Object

02

Virtualization

February 4, Tue 5:30pm – 9:30pm

721 Broadway, Room 652

Topics

Introduction to Virtualization and Emulation

How Computers Work: Hardware

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

Recommended

Johnson: [Considering Emulation for Digital Preservation](#) (2014)
 Rothenberg: [The Emulation Solution. Avoiding Technological Quicksand](#) (1998) [FULL DOCUMENT]
 Granger: [Emulation as a Digital Preservation Strategy](#) (2000)
 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](#)

03

Guest Lecturer: Sasha Arden, Institute of Fine Arts

Microcontrollers **Topics**

February 11, Tue 5:30pm
 – 9:30pm
 721 Broadway, Room 652

Introduction to the Arduino Microcontroller
 Microcontrollers for Conservation

Readings

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

Lab

Introduction to the Raspberry Pi
 Raspberry Pi with DHT11 Temperature/Humidity Sensor

Exercise files

DHT11 Wiring Diagram

Download, install, and run Adafruit's DHT11 sensor software

04

Troubleshooting Theory & Documentation

February 18, Tue 5:30pm
– 9:30pm
721 Broadway, Room 652

Topics

Troubleshooting Theory, Systems Mapping & Documentation
Discuss [Midterm Assignment](#)

Readings

Dulaney, Certification Magazine: [A guide to troubleshooting theory from a CompTIA A+ perspective](#)
Acaroglu: [Tools for Systems Thinkers: Systems Mapping](#)
Markdown Guide: [What's Markdown?](#)

Recommended

Jonnasen & Hung: [Learning to Troubleshoot](#)

Lab

Using Markdown for Documentation
Wordpress: [Markdown quick reference cheat sheet](#)
Open Lab Time for Assignment One

DUE: PROJECT PROPOSAL, FRIDAY, FEBRUARY 21ST

05

Digital Forensics: BitCurator & Disk Imaging

Guest Lecturer: Eddy Colloton, Project Conservator of Time-Based Media at the Hirshhorn Museum

Topics

Forensics: Basic concepts and usage for investigation and preservation
Forensic disk imaging for archiving and preservation
***NOTE:** *Nicole is away for conference*

February 25, Tue 5 30pm
 – 9:30pm
 721 Broadway, Room 652

Readings

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

Resources

[Disk imaging resources from Eddy Colloton](#)

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](#)

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)

06

Emulation as a Service

March 3, Tue 5:30pm –
 9 30pm
 721 Broadway, Room 652

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

Owens: [Emulation as a Service \(EaaS\) at Yale University Library](#) (2014)

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

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

Resources

Gates [emulation resources repository](#)

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

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

Lab

Open Lab Time for Midterm Assignment

07

Floppy Disks & Kryoflux

March 10, Tue 5:30pm –

9:30pm

721 Broadway, Room 652

Guest Lecturer: Shira Peltzman, Digital Archivist at UCLA Library

Topics

Archiving and preserving data stored on floppy disks

Readings

[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)

Recommended

[Waugh: A Dogged Pursuit: Capturing Forensic Images of 3.5" Floppy Disks](#)

Lab

Open Lab Time for Midterm Assignment

SPRING RECESS

March 16 - March 22

08

Midterm Presentations

Students give presentations for Assignment One

March 24, Tue 5 30pm

9:30pm

721 Broadway, Room 652

DUE: MIDTERM ASSIGNMENT, FRIDAY, MARCH 27TH

09

HCM in Museums I: The Complex Medium of Sound

March 31, Tue 5 30pm

9:30pm

721 Broadway, Room 652

Topics

Handling Complex Media in Museums

The Complex Medium of Sound

Readings

Pip 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](#)

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](#)

Gates: [See what you hear: Audio Calibration for Video Digitization](#)

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](#)

Lab

Open Lab Time for Final Assignment

10

Artist's Studio and Archive

April 7, Tue 5 30pm

9:30pm

721 Broadway, Room 652

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

Topics

The Artist's Studio and Archive

Readings

Lozano-Hemmer: [Best Practices for Conservation of Media Art from an Artist's Perspective](#) or download the [audio-only version](#)

Gallery emails - [PDF](#)

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

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

Recommended

[EAI resource guide](#)

Matters in Media Art website:

www.mattersinmediaart.org

Lozano Hemmer [Level of Confidence](#)

Lab

Open Lab Time for Final Assignment

11

HCM in Museums II & Discussion of Conservation Ethics

April 14, Tue 5:30pm –

9:30pm

721 Broadway, Room 652

Guest Speaker: Kate

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](#)

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

12

Digital Film

April 21, Tue 5:30pm –

9:30pm

721 Broadway, Room 652

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)

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

April 28, Tue 5:30pm –
9 30pm

721 Broadway, Room 652

Topics

Software-Based Art

Readings

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

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

Part I

Part II

Phillips, et al: [Restoring Brandon, Shu Lea Cheang's Early Web Artwork](#)

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](#)

Case studies

<https://walkerart.org/magazine/net-art-conservation-piotr-szyhalski>

[https //www cooperhewitt org/2013/08/26/planetary collecting-and-preserving-code-as-a-living-object/](https://www.cooperhewitt.org/2013/08/26/planetary-collecting-and-preserving-code-as-a-living-object/)

<http://www.vam.ac.uk/shekou/how-we-collected-wechat/>

Lab

Open Lab Time for Final Assignment

14

Last Class: Student Presentations

May 5, Tue 5:30pm – 9:30pm

721 Broadway, Room 652

DUE: FINAL PROJECT, FRIDAY, MAY 10TH

Handling Complex Media: CINE-GT 1805
Moving Image Archiving and Preservation
New York University

POWERED BY [SQUARESPACE](#).