

NYU Moving Image Archiving and Preservation (MIAP) Program

Fall 2020 Syllabus

CINE-GT 1808 Digital Literacy

Schedule

Course will be taught remotely via Zoom.

Tuesdays - 6:00-8:00 PM

Class Dates:

September 8, 15, 22, 29, October 6, 13, 20, 27, November 3, 10, 17, 24 December 1, 8

Contact information

pvizner@nyu.edu - 917-543 9016

Office hours: By appointment via Zoom.

Course Description

This class will prepare incoming first year MIAP students for working with digital technologies throughout their academic and professional careers. The course will focus on web applications, databases, and data management tools – technologies that play a fundamental role in moving image collections management today. The course will emphasize digital literacy so that students will be equipped to make informed technology decisions in the future. By introducing these topics in their first semester, this course provides students with core competencies that will be utilized in subsequent classes in the MIAP program.

Learning Objectives

Upon completion of the course, students will demonstrate their technical competency by being able to:

- **explain** how technology is created, deployed, adopted, used, and maintained. Students will be able to **describe** the power dynamics that enable implicit and explicit biases that determine how information is preserved and made accessible. They will be able to **summarize** the ethical considerations of both technologists and users;
- **summarize** fundamental technology concepts and elements, including but not limited to: operating systems, file systems, storage, application layers,

networks and the Web, data structures, and the role of programming and computing languages;

- **participate** in collaborative, open software and/or documentation practices and communities;
- **evaluate and describe** technical challenges by communicating clearly and effectively, improving their ability to collaborate with other technologists. Students will learn how to express themselves using technical and non-technical writing so they are empowered to work with those in adjacent computing or digital fields, vendors, and colleagues; and
- **compare** priorities of moving image archiving and preservation to traditional notions of information technology practices, and **identify** how these concepts intersect and overlap.

Course Texts & Resources

There is not a required textbook for this course. Most assigned readings are available online (free) or will be provided by the instructor and should be read before the class they are assigned for. The course will also require the use of free or pre-licensed software, which students may be required to download in order to complete in-class and homework assignments. Please come prepared with software downloaded and installed in advance of the class, when instructed. We will use NYU's subscription to LinkedIn Learning (Lynda.com) for online tutorials through nyu.edu/lynda as well as other freely-available, online training.

Attendance

Attendance at all classes is expected, as is on-time arrival. Please be prepared to begin at 6pm. Tardiness and unexpected absences will impact your grade - see the Assignments and Grading section for more details. Keep the break within the time allowed. In case of illness or unforeseen circumstances, students must communicate timely with me.

Most classes' activity instructions are provided in the document for that week - so you may complete the activity independently if you miss the opportunity to participate in class. You are responsible for the content of the classes you miss - you may schedule a visit to Office Hours to discuss any questions. If an assignment is due the week a student is absent or requesting an absence, it should be completed by the deadline. If the class you missed did not include a practical activity, I might ask you to write a short essay on the topics covered that day to make sure you are keeping up with the contents of the class.

Laptop

Students are required to use their own laptops in class each week. Either Windows or Mac are acceptable so long as your laptop meets the following minimum requirements:

Mac	Windows
OS 10.10 or later	7 or later
Intel Processor	Preferably 64 bit
At least 2 GB RAM	At least 2 GB RAM
At least 30 GB available disk space	At least 30 GB available disk space

If you do not have access to a laptop, or do not have one that meets these minimum requirements, you may be loaned one for use during class. Please email the instructor..

Communication

We will use the collaboration tool **Slack for communication about class topics, activities, and schedule changes**. This semester's URL is: **20F-DL.slack.com**

Everyone will receive an invitation to the class Slack account, and should install the Desktop application on their computers and/or the mobile application. There will be different channels set up within Slack for each topic. Help each other with troubleshooting and getting comfortable with this platform - this will factor into your participation grade. Ask and answer questions about using Slack in the **#help-me** channel.

Assignments, Grading and Deadlines

Each class will have one or more learning objectives and accompanying activities. Activities may be group or individual, and may be completed during class or as homework. Students will be required to turn in or otherwise demonstrate the results of weekly assignments before the start of the following class meeting, regardless of whether the activity was completed in class or as homework. Unless specified otherwise, students are encouraged to collaborate and troubleshoot assignments together.

There are 4 areas that determine your final grade. 100 total points are possible and are described below.

	elements, guidelines, and examples are available here .	
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On-time completion of assigned exercises is expected - tasks are designed to help students progressively build on the skill set they develop each week. If you are unable to complete an assignment on time, please email an explanation and expected submission date to the instructor at least 48 hours **before** the deadline. Unjustified and unapproved late submissions will affect your grade by **1 point penalty per day late**. Lateness for the final project will result in **3 point penalty per day late**.

Grade scores are as follow:

93-100	A	75- 79	B-	51-56	D+
89-92	A-	69-74	C+	45-50	D
85-88	B+	63-68	C	0-44	F
80-84	B	57-62	C-		

Please turn in any written reports, and documents in an editable document (preferred WORD). If sharing a link to the document, make sure you have granted the instructor access to it. Proofreading, editing, professional, and timely presentation of your work are important components of your grade. AV support (slides, photos, screen share) is highly advisable during class presentations.

Final project

The **final project** will be the identification of a need in or related to the digital archiving and preservation community, creating documentation around that need, and initial steps to address it. Reminders and activities related to the **final project will appear in bolded red text** in Course Schedule. Required elements are due:

- **October 27:** Rough idea of need (to be discussed in class).
- **November 3:** Defined need identified in “user story” format, as in-class exercise. 1 page project proposal.
- **November 24:** Brief summary of work completed towards final project, presented to the class with proposed work described for feedback. Slides or other presentation format acceptable.
- **December 8 (Last class):**
 - Written project charter including final “user story”, research summary, objectives, and methodology (2-4 pgs)
 - Annotated Bibliography/works referenced list

- Submission of a minimum of one of the following to provide evidence of your effort to address the need:
 - Github: new repository, pull request or issue submission on existing project addressing identified need
 - Submission to publicly-accessible review or feedback document, or written confirmation of submitted feedback
 - Detailed evidence of in-person contributions and participation.

Digital Archive of Student Work

All student projects are to be collected and made accessible on the Student Work page of the MIAP website (<https://tisch.nyu.edu/cinema-studies/miap/student-work>). Certain types of assignments will be password-protected and made accessible only to MIAP students and faculty. Students are required to submit all of their work for each class to their professor in a digital format (.pdf is encouraged for cross-platform compatibility) via email or other available digital medium.

As a primary goal of NYU's MIAP Program is to be useful to the archival field, the default status of student works will be public (with the exception of internship reports and thesis proposals). Students, in consultation with their instructor, can make a case for why a particular assignment should be restricted to internal use. Proprietary information, confidential information, or copyright issues may lead to this decision, but not a general unwillingness to make work public.

Formatting

Please click [here](#) for Style Guide. Provide the most persistent version of a link, opting for a permalink, URI, or persistent identifier if possible. Always credit the source, no matter what type of content you are using, and be mindful of the licenses (e.g., Creative Commons) under which information is made available.

When students submit digital files of their work, the file names should conform to MIAP's standard format, with *f* used to indicate fall semester and *s* used to indicate spring semester:

YYsemester_course number_author's last name_a[assignment#].file extension

Here is an example of a student with the surname Smith, submitting the first assignment in the fall 2017 course CINE-GT 1800:

17f_1800_Smith_a1.pdf

For multiple authors, the two initials of each author will be used, separated from each other by underscores. An underscore and the assignment number will follow this. Assignment numbers are determined by the order in which the assignments are given. They begin with an "a," followed by a number between one and ten. For assignments with multiple files, a letter can be added after the number. Thus, one could have "a1b," meaning that this is the second of multiple files from one student for one particular assignment. In the case of a restricted file that should not be made public, the student should add an "_x" to the end of the file name indicating the file's restricted status: 17f_1800_Smith_a1_x.pdf. Otherwise, permission shall be implicitly granted for the student's work to be posted on the MIAP website.

Important Policies & Resources

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](#) (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) 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>

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](https://nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/non-discrimination-and-anti-harassment-policy-and-complaint-proc.html) (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 this link (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)

This document has been adapted from earlier versions of CM syllabus available at the [NYU MIAP Courses Curriculum Archive](#).

Class Schedule

*** BEFORE CLASS 1: [Visit the Data Detox Kit](#) and complete the “Privacy” and “Security” sections ***

Class 1 (September 8)

Introduction to Digital Literacy: Technology and the Moving Image Archivist Data Privacy and Security

6:00-8:00pm

Due:

- Complete “Security” and “Privacy” sections in the Data Detox Kit

Topics:

- Course introduction and syllabus review
- Accessing course Slack account
- Why does a moving image archivist need to understand digital technologies?
- Technical evolution: continuous change and education
- Data privacy and data security.

Activities

- Class discussion
- Communication exercise
- Discussions on Data Detox Kit results.

Class 2 (September 15)

Digital Ecosystems: Files, applications and standards

Due:

- Watch before class: [Computer Science Principles: Digital Information](#) (LinkedIn Learning, 70 mins)

Topics:

- Key concepts: web, internet, digital vs. analog, files and media files, storage, cloud.
- Making it work: standards, requirements and documentation
- Desktop apps vs web-based tools
- What is a website?
- In-browser website manipulation

- Exploring the components and structure of a website
- Introduction to HTML, CSS

Activity:

- Getting started with Codecademy course

Class 3 (September 22)

Network Components and Communication

Due:

- Complete Course: Build your own website – Codecademy Make a Website: <https://www.codecademy.com/learn/make-a-website> (only complete free sections in modules 1 through 4. Approx. effort to complete: 9 hours) and send the following outputs **via Slack as a personal message**:
 - Deliverable 1: Code (html as a text file) and screenshot for last exercise of HTML (#12, change the site's title to your name)
 - Deliverable 2: Code (html and css as a text file) and screenshot for last exercise of CSS (#9, change the site's title to your name)
 - Deliverable 3: Code (html and css as a text file) and screenshot for last exercise of Boundaries and Space (#10, change the site's title to your name)
 - Deliverable 4: Code (html and css as a text file) and screenshot for last exercise of Bootstrap (#7, change the site's title to your name)
- Install
 - FTP client - Cyberduck (<https://cyberduck.io/>)
 - Text editor - Sublime text (<http://www.sublimetext.com/>)
 - If you are on Windows - download Putty (<https://www.putty.org/>)
- Set up your Digital Ocean server (you will receive an invitation from the instructor)

Topics:

- Clients (browsers) and servers
- What is a network?
- Introduction to the Open Systems Interconnection (OSI) networking reference model
- Network communication - TCP/IP
- File transfer - FTP, SFTP, SSH
- HTML DOM

Activities:

- Connecting to the server via SSH
- Transferring files to server

Class 4 (September 29)

Talking to your computer: GUI and Command Line Interface Part #1

Due:

- Evidence of file transfer via SSH (screenshots via Slack personal message)

Topics:

- Introduction to UNIX command line navigation

Activity:

- Working with command line on your own VPS: Tutorial:
<http://www.ee.surrey.ac.uk/Teaching/Unix/>

Suggested resources:

- Code Academy Command Line Tutorial:
<https://www.codecademy.com/learn/learn-the-command-line>. This is a paid course but a good resource to continue learning this topic.

Class 5 (October 6)

Talking to your computer: GUI and Command Line Interface Part #2

Due:

- Before class read Anthony Cocciolo (2014), “Unix Commands and Batch Processing for the Reluctant Librarian or Archivist,” Code4Lib journal, Issue 23, 2014-01-17.
Available from <https://journal.code4lib.org/articles/9158>
- Make sure you have installed Homebrew on your server: <https://brew.sh/>

Topics:

- Continuation: Introduction to UNIX command line navigation
Tutorial: <http://www.ee.surrey.ac.uk/Teaching/Unix/>
- Package management

Activity:

- Working with command line on your own VPS

Class 6 (October 13)

Data Management & Data Quality

Due:

- Surrey command line tutorial - text output **via personal message on Slack**.
- Share **on the resources channel in Slack** as a screen recording another command line exercise from the Surrey tutorial.
- Download OpenRefine: <http://openrefine.org/download.html>

Topics:

- Introduction to data storage formats: CSV, XML, SQL, SQLite

- Best practices for data creation in spreadsheets (Excel and Google Spreadsheets)
- Techniques for data import, export, and exchange
- Data quality and consistency - Google Refine
- Relational database management systems vs flat data management systems (e.g. Excel)
- Entity-relation modeling
- RDBMS features – keys, fields, etc.
- APIs
- How does data management (including fixity, reproducibility, sustainability) relate to preservation and archiving?

Activity:

- Tutorial – Best practices for metadata management using Excel
- If time: Developing a custom relational data model

Class 7 (October 20)

Digital Repositories and Management Systems Part 1

Due:

- Research on one system listed in the [Collection Management System Collection \(background blog from Ashley Blewer here\)](#). System will be assigned in the previous class. Results to be presented in class.

Topics:

- Introduction to Digital Repositories and Media/Asset/Content/Collection Management Systems
- Characteristics of above, and opportunities to support digital preservation efforts

Activities:

- Selecting the right system for your organization: students' presentations.

Class 8 (October 27)

Creating an online exhibit Part 1 - Functional requirements, use cases, and design (aka step away from the technology)

Due:

- **Rough idea/topic/question for final project: present your idea for the final project to the class.**

Topics:

- Defining system users and their roles
- Meeting users needs and expectations
- Understanding rights and permissions

- Introduction to Omeka, a free and open source web-publishing platform for the display of library, museum, archives, and scholarly collections and exhibitions.
- Features of Omeka
- Planning features of an exhibition

Activity:

- Developing user personas and use cases
- Develop and plan for an online exhibition

Read:

- Read articles in the “Getting Started with Project Planning” section of the Omeka Documentation. Available from:
<http://omeka.org/codex/Documentation>

Watch:

- Design Thinking:
<https://www.linkedin.com/learning/design-thinking-understanding-the-process/welcome?u=2131553>
- Stamford d.school mixtapes:
<https://dschool.stanford.edu/resources/chart-a-new-course-put-design-thinking-to-work>

Class 9 (November 3)

Creating an online exhibit Part 2 - Application installation

Due:

- **Defined need identified in “user story” format, via EMAIL.**
- **Final project: send proposal, no more than 1 page long, via EMAIL.**
- Read articles in the “Getting Started with the Software Application” section of the Omeka Documentation. Available from:
<http://omeka.org/codex/Documentation>

Topics:

- Domain creation
- Database setup
- Working with configuration files
- Introduction to Dublin Core

Activity:

- Installation of Omeka on server:
<https://websiteforstudents.com/install-omeka-classic-cms-on-ubuntu-16-04-17-10-18-04-with-apache2-mariadb-and-php-7-2/>

Class 10 (November 10)

Creating an online exhibit Part 3 – Adding and enhancing functionality + Adding data

Due:

- Ludovico Fischer (2013), “A Beginner's Guide to HTTP and REST,” Tuts+. Available from <https://code.tutsplus.com/tutorials/a-beginners-guide-to-http-and-rest--net-16340>

Topics:

- APIs
- Plugins and Templates
- Troubleshooting

Activities:

- Installing templates, plugins, and connecting Omeka to APIs
- Configuring User roles, rights and permissions
- Troubleshooting using StackExchange and other tech Q&A sites

Class 11 (November 17)

Creating an online exhibit Part 4 – Adding data

Due:

- Create a sample collection containing media files, text, and images to publish on your Omeka site.
- Create a simple spreadsheet with metadata about your files following the Dublin Core standard.

Topics

- Creating/gathering files for exhibition
- File editing, transformation, and upload
- The relationship between metadata and search engines
- Creation of files suitable for access

Activities

- File and metadata import

Class 12 (November 24)

My Code to the world - Git and GitHub

Due:

- **Brief summary of work completed towards final project, to be presented in class.**
- Upload at least 5 files and their metadata to your Omeka site. Send the site's IP address **via Slack as a personal message.**

Topics:

- How code is developed, managed and distributed (versioning, releases)

- Free/libre, open source, commercial, proprietary - software, documentation, standards
- Introduction to git and GitHub

Activities

- Using Git and Github
- Github web UI: create a repository with a README.md and license.
- Github via CLI: clone an existing repository to local. Make a change and commit to the repository.
- Make a pull request on your partner's repository.

Class 13 (December 1)

Reflections: Beyond Technology, Impact on the Field

Topics:

- Technical Best Practice from an Archival Perspective Topics

Activities:

- Class discussion:
 - Sponsorship, Stewardship programs, Training, Incentives
 - Revisit Data Privacy and Data Security
 - Intersection of preservation concerns with across organizations and teams, and digital considerations in contrast and in collaboration with physical archiving
 - How technical maintenance aligns with preservation or emulation practices (e.g., software preservation)
 - Based on experiences and resources in this course, how has your understanding of technology and its role in our profession changed?
 - What actions or inaction impact our work?

Class 14 (December 8)

- **Presentation of final projects**