MOVING IMAGE AND SOUND: BASIC ISSUES AND TRAINING
GT-2920

Fall 2022
Thursday 10-5pm, room 643, 665 Broadway
(On most class dates, we meet 1-5, with additional mandatory lab and class sessions to be scheduled Thursdays 10-12 or alternate times. Some classes begin at 10am in the lab. See below for details.)

Instructor: Ann Harris
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212-998-1606
665 Broadway, room 636
Office hours by appointment

Class requirements:
Attendance is required at all regularly scheduled class sessions. Any unexcused absence may result in an incomplete. All activities (practice sessions and field trips) not scheduled during the Thursday class time (i.e., 10-5) are strongly recommended, but failure to attend will not result in an incomplete.

Class participation is absolutely required in this class. The major part (70 percent) of your grade is based on class participation. This includes hands on projects, practice, and tests, as well as verbal class participation.

There is one written project in the class. This project includes an in-class, Zoom presentation. The project represents 30 percent of your grade. Your ability to deliver the paper and presentation on time will be a significant part of that grade.

Required Readings:
- Moving Image Technology: From Zoetrope to Digital, Leo Enticknap, 2005, Wallflower Press
- How Video Works: From Broadcast to the Cloud (3rd edition), Marcus Weise and Diana Weynand, 2016, Focal Press
- Color Mania: The Material of Color in Photography and Film, Barbara Flueckiger, Eva Hielscher, Nadine Wietlisbach (ed), Fotomuseum Winterthur, 2019
- The Art of Film Projection, Paolo Cherchi Usai, Spencer Christiano, Catherine Surowiec, Timothy Wagner, George Eastman Museum, 2019
- Other readings are taken from a variety of sources, many of them available online, through links provided on the web version of this syllabus. Some readings and resources, that are not otherwise available online, will be available through NYU Brightspace.
- To access NYU Brightspace, log in to NYUHome (https://globalhome.nyu.edu), click the Academics tab, and then click the course link in the list provided. If this class does not appear in the list, try clicking the “Update Classes Information” link at the bottom of the academics channel. If you still have trouble accessing an NYU Brightspace site, contact the IT Service Desk at 1-212-998-3333.
- Some of the texts not available online will be on reserve at the Cinema Studies/MIAP Film Study Center, located on the sixth floor of 721 Broadway. https://cinemaresources.hosting.nyu.edu/cinema.resources/cinemaresources.html
Class Goals:

After completing this course, you should:

- Understand the history of moving image formats and the conditions for their development
- Be able to identify a wide variety of moving image formats
- Understand the basics of film, video and audio systems
- Understand the physical properties of moving image media
- Be familiar with physical storage standards for various kinds of media
- Have mastered basic moving image media handling techniques and skills
- Have achieved basic moving image inspection and condition assessment skills
- Be familiar with a range of documentation/metadata schemes and tools
- Have demonstrated basic film repair skills

Class Sessions

Sept 1 Introduction
Sept 8 Film Formats
Sept 15 Film Formats / Audio for Film
Sept 22 Film Identification / Inspection and Documentation / Color Systems
Sept 29 Media Storage / Film Repair Techniques and Tools
Oct 6 Film Handling and Presentation: Projection and Optics
Oct 13 Audio Preservation / Capturing Metadata / Audio Format Identification
Oct 20 Digital Images / Machine Calibration / Video Format Identification, Video Signal, Inspection, Assessment
Oct 27 Video Preservation Issues
Nov 3 Film Preservation Issues
Nov 10 Film Access Copies
Dec 1 35mm Projection / Wrap Up
Dec 8 no class - AMIA Conference

Sept 1 -- Introduction

Topics covered:

What is this class about?

Class participants’ backgrounds, skills and goals

Screening: Captain Celluloid Versus the Film Pirates, 1966, excerpt

Core Concepts
Audio Visual Systems
Media format History:

https://www.girona.cat/web/sgdap/cat/CRDI_Cronologies/angles/index.html#lprettyPhoto[1]/14/

Analog versus Digital: Take One

Practice: Take a look at some examples of audio visual media

Important:
Sign up for a Bobst Library Research/Resources Session with librarian Giana Ricci.

Sept 8 -- Film Formats
Assignments due before class:

Visit websites:
- History of sub-35 mm Film Formats & Cameras on Welcome to Ani-mato, Jan-Eric Nyström, 2003-5.
- Descriptions of the 4 film gauges on the homepage of http://www.littlefilm.org/
- More than one hundred years of Film Sizes by Michael Rogge, 1996.
- The Ultimate Table of Formats-- Aspect Ratios by Mark Baldock.
- Leo Enticknap, "Film" and "Cinematography and Film Formats", Moving Image Technology, pp 4-73.
- Image Permanence Institute: filmcare.org (take a look at the Motion Picture Film Technology Timeline)
- Folkstreams: video guides to multiple processes and procedures: https://www.folkstreams.net/vafp/video

Optional:
- National Film and Sound Archive: Technical Preservation Handbook (first 5 sections: Film Construction, Base Polymers and Decomposition, Gelatin, Image Forming Materials, Damage to Film)
- Ken Marsh, "The Big Works", Independent Video, pages 1-6. (Find this on NYU Classes or read reserve copy in Cinema Studies/MIAP Film Study Center)

Topics covered:
- Introduction to the physical and chemical structure of film
- History and variety of film formats
- What artifacts exist as a result of media production? What should be saved? How can Knowledge of production process aid identification?

Practice:
- Film Handling Techniques and Tools
- Use of rewrites and split reels

Choose written project topics in class.

Sept 15 -- Video and Audio Formats / Audio For Film

Assignments due before class:

Read:
- Leo Enticknap, Moving Image Technology, pp. 98-131 and 159-186
- Video Preservation Handbook, pp 1-6 section II. (on AMIA page, scroll down to find the link)

Visit websites:
- Timothy Vitale and Paul Messier, 2013, video preservation.
- California Preservation Audiovisual format identification guide
- Texas Commission on the Arts Videotape Identification and Assessment Guide

Review:
- Pictorial History of Media Technology
- LabGuy’s World: The History of Video Tape Recorders before Betamax and VHS
- Museum of Obsolete Media
- Terra Media’s Chronology of Video

Optional--Watch and Listen:
- Sound Waves and Their Sources http://www.archive.org/details/SoundWavesAn
- Electromagnetism http://www.archive.org/details/electromagnetism
- Sound Recording and Reproduction (Sound on Film) http://www.archive.org/details/SoundRec1943
Optional--Read:
- VideoFreex, "Hardware," Spaghetti City Video Manual, pp. 3-27

Topics covered:
- Introduction to the physical and chemical structure of audio and video media
- The technologies behind audio and video signals and formats
- History of audio and video formats
- Relationship between media

Screening: Discovering Cinema: Movies Learn to Talk, 2004, Eric Lange and Serge Bromberg

Practice:
- Re-housing media (VHS and audio cassette)
- Practice loading and transporting media

Sept 22 -- Film Identification/Inspection and Documentation / Color Systems

Read:
- Guide to Identifying Color Movie Film Stocks by Paul Ivester.
- Paul Read and Mark-Paul Meyer, "Identification of Archive Film and Interpretation of Historical Data," Restoration of Motion Picture Film, pp. 53-68.
- Barbara Flueckiger, Timeline of Historical Film Colors.
- Annette Melville, ed., The Film Preservation Guide:
  - Film Handling and Inspection
  - Film Condition Report, National Screen and Sound Archive, Australia,
- National Film and Sound Archive (Australia), Film Identification, Film Preservation Handbook
- Kodak, Handling of Processed Film
- Shrinkage Measured, AMIA, 2003. (on AMIA page, scroll down to find the link, under Guidelines)

Optional--Read:
Thilo Koenig, “(In) Visible Color”, Color Mania, pp. 51-78.

Topics covered:
- Film Color
- Film Formats
- Recognizing Film Element Type (release print, A/B rolls, negatives, etc.)
- Recognizing basic film types (reversal vs. print from negative; kinds of sound tracks, etc.)
- Film Edge Codes
- Film Inspection
  - Recognizing mechanical damage to film
  - Recognizing chemical/biological damage to film
- What is vinegar syndrome?
  - Using and reading AD strips

Practice:
- edge code reading exercise
- reading and setting up AD strip tests
Sept 29 -- Media Storage / Film Repair Techniques and Tools

Assignments due before class:

Read:
- Screensound Australia, *Technical Preservation Handbook*
  - Condition Reporting
  - Photo Duplication: Image Quality
  - Cold Storage of Film
  - Long Term Storage
  - Work Health and Safety
- IPI Climate Notebook, Image Permanence Institute.
- James M. Reilly, *IPI Storage Guide for Acetate Film*, Image Permanence Institute
- James M. Reilly *IPI Storage Guide for Color Film*, Image Permanence Institute
- Kodak, *Splicing For the Professional*, Film Notes Issue #H-50-01. On the Film-Tech page, in the upper left corner, click on "warehouse home", then manuals. Scroll down to "Eastman Kodak Film Notes". It is the first listed
- National Film and Sound Archive (Australia), *Film Repair*, Film Preservation Handbook.

Topics covered:
- Film Inspection
- Film shrinkage
  - Use of Shrinkage gauge
- Film Quality Assessment
  - Color quality, contrast, grain, resolution, sharpness
- Film Storage Issues
- Using 16mm film viewers
  - Table Top Viewers
  - Cinescan
  - Steenbeck
- Film Repair Techniques and Tools
  - hot splicers
  - tape splicers
  - Sprocket repair

Important:
Sign up for first film splicing practice time appointments.

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Oct 6 -- Film Handling and Presentation: Projection and Optics

Assignments due before class:

Read:
- Paolo Cherchi Usai, Spencer Christiano, Catherine Surowiec, Timothy Wagner, "The Projector", The Art of Film Projection, George Eastman Museum, 2019, pp. 43-77.

Topics covered:
- Inside a 16mm Projector
- Small gauge film projection practice
Oct 13 -- Analog Signal Errors / Audio History and Preservation

Assignments due before class:

Read:
- Sound Directions Publication, Read Chapter 4. “Metadata”.
- Bobst Library Preservation-ViPIRS project: ¼” Audio Tape

Review:
- AES Audio Metadata Standards

Topics Covered:
- Audio Tape history and tape structure
- Analog Signal Error
- Audio Preservation Workflow
- Database versus Spreadsheet

Practice:
- Practice loading and transporting various audio media
- Practice collecting metadata for analog audio material

Important:
- Sign up for audio digitization sessions with Dylan Lorenz.
- Format History Outline due before class (approximately 2 pages).

Oct 20 -- Digital Images / Machine Calibration / Video Format Identification, The Video Signal, Inspection and Assessment

Assignments due before class

Read:
- Task Force to establish selection criteria of analogue and digital audio contents for transfer to data formats for preservation purposes. Click Publications -> IASA Publications and scroll down.
- AMIA Videotape Preservation Fact Sheets, Tape Inspection (Fact Sheet 9, begins page 20), Video Preservation Fact Sheets, 2003. (on AMIA page, scroll down and find the link)
- John W.C. Van Bogart, Magnetic Tape Storage and Handling.
- Fred R. Byers, Care and Handling of CDs and DVDs.
- Video Preservation Handbook, pp 7, section II.
- Bobst Library Preservation-ViPIRS project: Manual for VHS/U-Matic
- Moving Theory into Practice: Digital Imaging Tutorial, Cornell University

Visit website:
- Experimental TV Center

Screenings:
- How TV Works, Dan Sandin, 1977, 27 min. 28 sec.

Topics covered:
- The state of assessment and prioritization
- Available tools and guides
- Degradation mechanisms and risks of loss
- Care and handling of AV media for preservation
- Equipment and tools needed for identification and inspection
Practice:
- Practice using identification and inspection tools
- Practice: calibrating equipment

Oct 27 -- Video Preservation Issues

Assignments due before class

Read:
- Luke Hones, Experimental Video Center, Reel to Real: A Case Study of BAVC's Remastering Model
- Johannes Gfeller, Agather Jarczyk, Joanna Phillips, Compendium of Image Errors in Analogue Video, pp. 48-115 and 160-170 (there is a copy of this book on reserve in the Film Study Center)
- NYU Preservation and Conservation Lab, Digitizing Video for Long-Term Preservation: An RFP Guide and Template
- David Rice and Chris Lacinak, Digital Tape Preservation Strategy: Preserving Data or Video?
- Chris Lacinak, A Primer on Codecs for Moving Image and Sound Archives
- Chris Lacinak, panel chair, AMIA/IASA 2010 • Wrappers and Codecs: A Survey of Selection Strategies
- A/V Artifact Atlas, on Internet Archive and A/V Artifact Atlas links on BAVC.
- American Society of Media Photographers, Video File Format Overview: http://www.dpbestflow.org/Video_Format_Overview

Topics covered:
- Analog Video History: What Are We Preserving
- Analog Video Signal Errors
- Characteristics of Digital Video Formats
- Preservation Formats: what are the issues?

Screenings:
- Calligrams, Steina and Woody Vasulka, 1970 (excerpt: 4 min.)
- Video Tape Repair, 1986 (excerpt: 5 min.)
- Playback: Preserving Analog Video (excerpts)

Practice:
- Video Cleaning techniques
- Umatic Tape disassembly, assembly

Nov 3 -- Film Preservation Issues

Assignments due before class

Read:
- Read, Paul and Mark-Paul Meyer. "Introduction to the Restoration of Motion Picture Film”, Restoration of Motion Picture Film, Oxford: Butterworth-Heinemann, 2000, pp 1-5.
- Gartenberg, Jon, "The Fragile Emulsion", The Moving Image 2:2 (Fall 2002), pp 142-152
- Annette Melville, The Film Preservation Guide.
  - The Curatorial Role
  - Duplicatin
Audio-Visual Working Group, 2016, *Digitizing Motion Picture Film: Exploration of the Issues and Sample SOW*

Optional Reading
- Screen Sound Australia, *Photo Duplication*, Film Preservation Handbook.

**Topics covered:**

**Film Preservation Issues:**
- Film preservation terminology: How do we differentiate among the terms preservation, conservation, restoration, reconstruction?
- What are some of the major issues with film preservation?
- What is the role of the film laboratory?
- Film Preservation--using digital means

Nov 10 -- Film Scanning / Film Access Copies / Reports from AMIA

**Assignments due before class:**

Read:
- Department MWA Flashscan handbook on NYU classes
- *Preserving Early Motion Picture History with the Kinetta Archival Scanner*

Topics covered:
- Focus on Technical and Structural metadata
- The role of metadata generated in inspection, assessment and preparation for long term storage and reformatting
- Digital Cinema

Nov 17 -- Student Presentations of Format / Process History Project

Format History Project: digital copies of presentation must be delivered by the start of class;
Class will start at 12pm.
Final papers for Format Project are due December 8.

Dec 1 -- 35mm Projection / Low Budget Film Access Copies / Wrap Up

Class Meets at 10:00am to 1:00pm - The 35mm Projection Booth, 721 Broadway, room 648
2:00pm – The MIAP Lab

**Assignments due before class:**

Read:
- Cinema Studies Department 35mm Projection Manual
- AMIA Venue Assessment for 35mm Projection

Topics Covered:
- 10am Session – 35mm Projection
- 2pm Session – wrap up

Dec 8 -- No Class -- AMIA Conference

Final papers for Format Project are due.
Research Assignment

Examples of student work from 2006-2018

All projects must be submitted in electronic format. The final versions of these projects will be made part of the MIAP digital archive, available online.

Research Project—Historical Paper and Presentation: In this project, each student will choose one film, video or audio format or one film, video or audio process to research. You must properly cite reference sources. Here is a link to the Chicago / Turabian style notation and footnotes organization: https://writing.wisc.edu/Handbook/DocChicago.html.

You must create an annotated bibliography and a detailed description/history that must include:

- time period for the format / process
- physical/chemical makeup and properties; file structure, platform requirements, compression, codec, etc.
  - oxide used, track configuration, physical dimensions, housing, sprocket size and configuration, varieties of emulsion composition and characteristics, etc., as appropriate to the format/media
  - If you are researching a process, provide a detailed description of how the process worked.
- associated playback devices or equipment
- competing formats / processes
- main user groups and use environments
- well known content associated with the format / process
- formats/processes that preceded and followed
- what, if any, technological capabilities were introduced on entry of the format / process into the market?
- what, if any, technological capabilities lead to the demise of the format / process in the market?
- known preservation issues/concerns

The annotated bibliography should cover the whole format / process, but the paper, beyond the elements above, can focus on one aspect or variation of the format or process.

FORMATS / PROCESSES (you must choose a topic from this list or propose an alternative, with a written justification that must be accepted by your instructor. Alternative topics must fit the basic structure of the project as described above):

- 16 2/3 rpm vinyl record (audio)
- CD Video (CDV) (video)
- compressed air pneumatic auxiliary amplification
- Cousino Echomatic cartridge
- dichroic prisms
- Exabyte tape (data tape)
- Herophon
- film recorder (film)
- UMD Video (universal media disk)
- Foma Film (film)
- Grundig Stenorette tape cartridge
- pinchart (film color process)
- wire cartridge (RCA)
- Sirius Kleuren Film Maatschappij (film color process)
- Sony 1 "EV (video)
- Stenocord magnetic belt
- Telediagraph / telephoto / radiophoto
- Vacuumate Film Protective Process
- Shibaden 1/2-inch open reel video
- Sony Ruvi (video)
- Phonautograph (audio)
- Showscan
- maltese cross
- Hutspiel 1955, video war game
- Sabamobil audio cartridge
- wav file format
A brief list of resources:

- The Pal Site (http://www.palsite.com/)
- The American Widescreen Museum, (http://www.widescreenmuseum.com/index.htm) information on color processes, sound, as well as widescreen processes.
- Museum of Obsolete Media
- Manufacturer Websites
- Equipment Manuals
- Patents
- Journal of the SMPE/SMPTE (digitized versions of some issues, post 1930: http://www.archive.org/search.php?query=motion%20picture%20engineers%20AND%20mediatype%3Atexts). Hard copies of many issues available through the department Film Study Center
- Brown, FIAF Technical Manual
- Coe, History of Movie Photography
- Ryan, A History of Motion Picture Color Technology

Due dates---Two page outline, October 13. The outline should be as specific as possible. It should show how you will address the topics listed above and should contain the beginnings of your bibliography. It does not, however, have to be in the form of an outline. It must include one or two paragraphs that clearly describe what you propose to do.

Final written report, December 8; In class presentation, November 17 (digital copies of presentation due at beginning of class).

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*Annotated Bibliography from The University of Wisconsin, Madison, Writing Center
https://writing.wisc.edu/handbook/assignments/annotatedbibliography/

Annotated Bibliography

An annotated bibliography is an organized list of sources, each of which is followed by a brief note or “annotation.”

These annotations do one or more of the following:

- describe the content and focus of the book or article
- suggest the source’s usefulness to your research
- evaluate its method, conclusions, or reliability
- record your reactions to the source.

Your annotated bibliography may include some of these or all of these.

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.

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### Important Policies and 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: contact 212-443-9999 or via their website. Also, all students who may require academic accommodation due to a qualified disability, physical or mental, please register with the Moses Center for Student Accessibility (CSA): contact 212-998-4980 or via their website. 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**
  New York University (NYU) is committed to providing a safe environment for its Students. Sexual Misconduct, Relationship Violence, and Stalking are emotionally and physically traumatic, and are a violation of one’s rights. There are many on-campus and community support services and resources available to help Students. Students are encouraged to consult the online Sexual Misconduct, Relationship Violence, and Stalking Resource Guide for Students (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**
  New York University (NYU) is committed to complying with Title IX and related laws and guidance, enforcing University policies prohibiting discrimination, and maintaining a safe learning, living, and working environment. To that end, the responsibilities of NYU’s Office of Equal Opportunity (OEO) include managing the University’s response to reports of discrimination, including alleged violations of NYU’s Sexual Misconduct, Relationship Violence, and Stalking Policy (Sexual Misconduct Policy). Detailed information regarding these laws and related NYU 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**
  New York University is committed to equal treatment and opportunity for its students; to maintaining an environment that is free of bias, prejudice, discrimination, harassment, and retaliation; and to establishing complaint procedures for allegations involving students. This policy demonstrates the University’s strong commitment to prevent discrimination and harassment against students on the bases of several protected characteristics as set forth below. This policy applies regardless of whether the alleged wrongdoer is a student. This policy applies when the conduct occurs on NYU premises, in the context of an NYU program or activity (including but not limited to NYU-sponsored study abroad, research, or internship program), or the conduct occurs outside the context of an NYU program or activity but (i) has continuing adverse effects on NYU premises or in any NYU program or activity or (ii) occurs in close proximity to NYU premises and is connected to violative conduct on NYU premises.

NYU strongly encourages all members of the University community who have been victims of prohibited discrimination, prohibited harassment, or retaliation to report the conduct. In the case of incidents of prohibited discrimination and prohibited harassment alleged to have been committed against students, the student
complainant or other reporting party may make a report to anyone listed on this website: 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) which also has detailed information about on-campus and community support services, resources, and reporting procedures. 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 the offices linked above.

- **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 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/wise-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)

  - **Moses Center for Student Accessibility (CSA)**
    https://www.nyu.edu/students/communities-and-groups/student-accessibility.html
    726 Broadway, 3rd Floor, 212-998-4980, mosescsd@nyu.edu
    New York University is committed to providing equal educational opportunity and participation for all students. The Moses Center for Student Accessibility (CSA) works with NYU students to determine and implement appropriate and reasonable accommodations as well as connect to available programs and resources to support equal access to a world-class education. CSA provides services for undergraduate and graduate students (and other students enrolled in an NYU course) with hearing and visual, mobility, learning and attention, chronic illness, psychological and temporary needs. Learn more about CSA services at nyu.edu/csa.