



Photography and Imaging – AD340-002 – SPRING 2025

Thursday 8:30 AM – 12:50 AM; Weston 650

Office Hours: Monday Mornings by Appointment; Weston 683

Instructor: Professor Glenn Goldman; glenn.goldman@njit.edu; x3012

Prerequisites: AD 150 or ARCH 396 or Permission of the Instructor

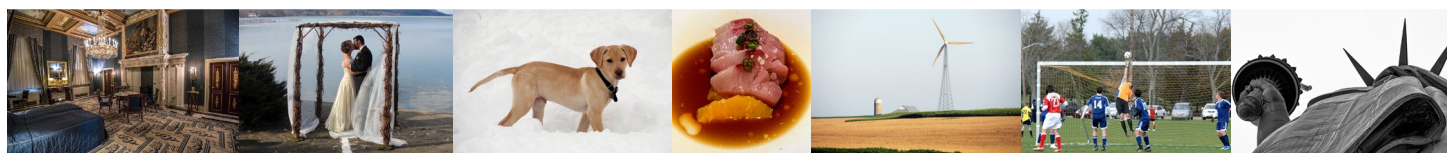
COURSE OVERVIEW:

Photography has, in many ways, transformed from merely composing a photo in place, on site, with (or without) a limited palette of adjustments in the darkroom and/or at the printer to a process that initially collects data on a sensor (after selecting what to photograph), and then encompasses the manipulation of that data to provide a good photograph. The digital environment has enabled “run and shoot” photographers to create artistic compositions and high-quality images previously the domain of those artists who waited for the “perfect conditions” to shoot, and then complete the task in the darkroom.

Photography and Imaging will introduce photography as an artistic medium in a digital context; one that deals with a variety of subjects (people and animals, architecture, landscape and flowers, food, street life, product shots/portfolio, storytelling, etc.). Each type of subject tends to have its own set of requirements, yet they share aspects of the image creation process in common. General photographic principles and techniques will be discussed including image processing, in/on-camera filters and post-processing filters, camera controls, and – of significant importance – compositional elements. Student photography projects will be required. Experiment(s)/project(s) in 360° photography will be included (and specialized equipment will be made available to students for this specific endeavor). Photography will be considered as a convergence of art and technology. Assignments will incorporate technical, creative, aesthetic, and expressive criteria. Projects will include both black and white, and color photography.

The class will look at photography in both synthetic and analytic contexts. Students will be taking and processing photographs as well as analyzing and providing critiques to/for photographs publicly available as well as those produced by their colleagues in the class in both written and oral form. A limited survey of the history of photography based on genre that includes the work of significant photographer artists (e.g., Julius Shulman, Ansel Adams, Bill Cunningham, Dorothea Lange) will be included in the course and students will be required to analyze the work of other photographers.

The three components that go into the photo-creation process (camera, post-processing software, shot selection) will all be considered, discussed, and applied to various situations. Students will use their own image data collecting equipment (camera and lenses) but shot selection and composition will be discussed in class and targeted assignments made. Processing of camera RAW images may be done in the Weston 650. There will be assignments every week and classroom participation is required. There will be photo shoot field trips. NOTE: students must provide their own interchangeable lens camera for use during the semester (either DSLR or mirrorless). Full sensor or crop sensor cameras are both acceptable. Cameras MUST be capable of shooting in “RAW” format (e.g., NEF for Nikon, ARW or SR2 for Sony, CRW or CR2 for Canon, RW2 for Panasonic/Lumix, RAF for Fuji) and have some manual controls (e.g., aperture or speed priority).



LEARNING OBJECTIVES:

- Provide an opportunity for students to create digital photographic imagery with control and sophistication;
- Emphasize the development of techniques that will assist in the integration of an understanding of digital and photographic media in achieving graphic and design intent;
- Place photography in an artistic and historical context;
- Assist students in documenting and presenting professional and student work;
- Provide continuing practice in the ability to recognize and incorporate basic design elements and principles into graphic compositions;
- Provide an opportunity to experiment with a variety of post-processing applications for photography;
- To reinforce the media-independent sense of quality and craft that is emphasized throughout the A+D curricula;
- To provide opportunity to practice communication skills; To comply with **NASAD** (National Association of Schools of Art and Design) professional standards as they apply to an introduction to basic design principles; the use and integration of technology in art and design; and to provide opportunities for students to expand and apply their knowledge of color theory and basic design principles in photography;
- To comply with **CIDA** (Council for Interior Design Accreditation) 2024 professional standards listed below:
 - 9b – Communication:** Students are able to effectively express ideas and their rationale in oral communication.
 - 9f – Communication:** The interior design program provides opportunities for exposure to evolving communication technologies.
 - 10a – History and Theory:** Students understand the basic context and framework of history as it relates to art.
 - 11a – Design Elements and Principles:** Students understand the elements and principles of design and related theories...
 - 12b – Light and Color:** Students understand the principles of natural and artificial lighting design.
 - 12f – Light and Color:** Student work demonstrates understanding of color principles, theories, systems, and terminology.

COURSE REQUIREMENTS:

Weekly assignments will be made. Many of the assignments will be a combination of analytic and synthetic work. Depending on the assignment and timing, some work may be done in the lab during class when individual critiques are offered (similar to studio). The creative aspect of the photography assignments will be the taking of specific types of pictures (either by genre or targeted subject), digitally processing those photographs by graphically manipulating the sensor-collected data, and offering criticism and analysis (sometimes written, sometime oral) of the photographs taken and processed by classmates to help them improve their photography. When comments about the work of colleagues are required, the number, frequency, and quality of comments will be considered as part of the overall grade.

The class will, at times, make use of a combination of shared folders on Google Drive and the temporary storage on the HCAD network ("R Drive") to post photos for specific assignments. Students will receive an invitation from the instructor to share a common folder where they may post their photos.

Some photographic assignments will be independent, outside of (and between) classes. There will also be some photo shoots during class time to facilitate collaborative learning about framing and selecting shots. While some of this will be local, there will be some travel. Specifically, it is anticipated (subject to weather and other external conditions) that the class will travel to the **New York Botanical Gardens** (2900 Southern Boulevard, Bronx) for flower and macro photography (or, if the class chooses, possibly the **Philadelphia Flower Show**), and to the **Bronx Zoo** (2300 Southern Boulevard, Bronx) for wildlife/animal photography either late March and/or early April. These trips do have associated transportation and admission costs and will go beyond normal class time, and some students may have to leave early to return to NJIT. *Please note that if you miss other classes for this trip, those absences would NOT be considered excused absences.*

The requirements/deliverables for the class can be viewed in four sections:

1. **Analysis Project:** a short paper and illustrated oral in-class presentation analyzing the work of a specified photographer and a photo essay in the style of the assigned photographer. (20%)
2. **Participation:** commentary in class discussions AND online critique for posted photographs as instructed in short assignments. (15%)
3. **Short Photography Projects:** regular photographic assignments that will require the taking and editing of a series of photos of a subject or genre. (40%)
4. **Photo Book Visual Essay:** the creation of a digital photobook ready for printing that expresses a photographic point of view – stylistically and/or by subject due as a take-home final exam. (25%)

NOTE: Relative values of assignments are subject to change when/if assignments change.

ACADEMIC INTEGRITY:

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree on which you are working. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: [NJIT Academic Integrity Code](#).

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu

To be clear, do your own work (except when group work is assigned), cite sources properly when writing or presenting research, and comply with requirements for examinations, quizzes, and projects. While you may (and are expected to) be inspired by work you see in books, exhibits, and online, you must take care NOT TO COPY or produce clearly derivative work except when explicitly instructed to. In those instances where you are creating work as homage to another artist, proper credit to the original artist must be made.

(GENERATIVE) ARTIFICIAL INTELLIGENCE:

It is impossible to create photographs today without the use of artificial intelligence. It is embedded in virtually all software used for image manipulation. HOWEVER, the extent to which AI is used, when it is used, and how it is used are all limited in the class with very specific constraints. There will be times when you will be instructed specifically to experiment with generative AI to create images. But the default position, unless stated otherwise, will be that AI embedded within the image processing and photomanipulation software for photo corrections (getting rid of sensor noise, adjusting color balance or tone, removing extraneous non-critical objects, etc.) is generally acceptable. But using generative AI to expand an image, or add elements not present, is NOT permitted except when explicitly approved by the instructor on a case-by-case basis. Generative AI may be used for oral and written analysis assignments. BUT students are responsible for all content and must be aware that the current state of generative AI still produces false information and can provide faulty analyses.

CELL PHONE USE AND MISCELLANEOUS POLICIES:

Cell phone use (including texting) is NOT permitted during lectures and presentations made by either the instructor or your classmates at any time! It is a *distraction* that steals the ability to concentrate from students and the presenter. Do not use cell phones (including texting) during lab time when you are expected to be working. When permitted, students should go into the corridor to speak.

Lectures or video presentations by a student, teacher, or guest lecturer may not be recorded at any time due to the inclusion of copyrighted material/intellectual property shown within "fair use" provisions.

Food and drink are NOT in permitted in the lab (Weston 650). **Do not even bring in food or drink!** You may, however, have food or drink outside the lab if/when you take a short break during work sessions. Food and drink may be used as a photographic subject in other spaces in the Weston-Colton-Campbell complex. You may consume food and drink during external photo shoots to the extent that (1) it is permitted in the venue where the photo shoot is taking place and (2) it is not interfering with your ability to take the required photographs.

ATTENDANCE:

ALL students (regardless of "home program" at NJIT) enrolled for classes in the School of Art + Design also have an attendance requirement overlaid on the grading criteria. (This requirement/penalty is separate from the participation component of the grade.) No more than three unexcused absences are permitted without a grade reduction. Each unexcused absence above three (starting with the fourth) will result in a full grade reduction for the semester. In other words, four absences would result in a maximum grade of B (assuming everything done is of "A" quality), five absences would result in a maximum grade of "C", six in a maximum grade of "D", etc. This means if you have 7 unexcused absences (about half the semester), you cannot pass the course. Students do NOT receive extensions for submission of work due to unexcused absences. Acceptance of late work (with penalty) may be accepted up to one week past the initial due date/deadline (except for the final project). Absences for illness to be excused MUST be accompanied by documentation from professional medical personnel who are NOT members of your family and submitted to the Office of the Dean of Students who, upon approval, will notify the instructor. ***Since religious holidays are known in advance, students who expect to be absent due to religious holidays must notify their lab/studio instructor by the second week of class.*** Absences for religious holidays (assuming proper notification) are considered excused absences and due dates of assignments will be adjusted so that work is submitted as soon as practicable at the conclusion of the holiday. It is the student's responsibility to get to class on time. The instructor is under no obligation to repeat any missed information or provide access to lecture notes or presentation materials to students who arrive late, and it remains the responsibility of the student to learn the material presented in the course. Tardiness for in-person classes is particularly disruptive and rude.

ACCOMMODATIONS FOR DISABILITIES:

NJIT and instructors will endeavor to make any accommodation required and necessary for the success of students with disabilities. However, in order to receive accommodation(s), disabilities MUST be documented with NJIT Office of Accessibility Resources and Services (201 Kupfrian Hall; oars@njit.edu) and notification of request for accommodation must be made to the instructor by the second week of class. More information may be found at: <https://www.njit.edu/accessibility/>. No accommodations can be granted “after the fact” unless due to a situation (injury/illness/etc.) that occurs or is documented during the semester. In those instances, accommodations will commence upon notification or observation of the disability. If approved for accommodation(s), it is at the discretion of the approved students whether or not to avail themselves of these opportunities. Failure to utilize approved accommodations will not be considered when preparing final grades or assessments for the course. Please understand that some accommodations are publicly evident (like extended time on project presentations) and utilization of these accommodations will be seen by other students which removes any right(s) to privacy about those accommodations.

Color deficient vision is not considered a disability that will prevent full completion of the course. Those students with color deficient vision (and A+D students used the Ishihara Test in AD 150, Color and Composition, to check) shall make themselves known to the instructor and assignments will be modified when and if necessary. Students who have not taken AD 150 and/or who have unsure about their own vision may do a quick check for color deficient vision to determine whether or not this applies to them.

NOTE: While there are always financial exigencies, an inability to secure the proper equipment (i.e. interchangeable lens camera with sufficient manual control and an ability to shoot in RAW format) is not a disability that can be accommodated.

BIBLIOGRAPHY/REFERENCES/RESOURCES:

Books.

Ang, Tom. *Digital Photographer's Handbook/7th Edition*. New York: DK Publishing, 2020.

Ang, Tom. *The Complete Photographer*. New York: DK Publishing, 2010.

Ang, Tom. *Fundamentals of Photography: The Essential Handbook for Both Digital and Film Cameras* (Revised and Updated by Vincent Burgeon). New York: Alfred A. Knopf, 2017.

Barrett, Terry. *Criticizing Photographs: An Introduction to Understanding Images/4th Edition*. New York: McGraw-Hill, 2006.

Carroll, Henry. *Read This if You Want to Take Great Photographs*. London: Laurence King Publishing Ltd., 2014.

Carroll, Henry. *Read This if You Want to Take Great Photographs of Places*. London: Laurence King Publishing Ltd., 2017.

Chavez, Conrad. *Adobe Photoshop Classroom in a Book/2025 Release*. Hoboken, NJ: Adobe Press/Peachpit (Pearson Education), 2025.

Concepcion, Rafael. *Adobe Photoshop and Lightroom Classic Classroom in a Book/3rd Edition*. Hoboken, NJ: Adobe Press/Peachpit (Pearson Education), 2022.

Fordham, Demetrius. *What they didn't teach you in photo school: what you actually need to know to succeed in the industry*. London: Octopus Publishing Group, Ltd., 2015.

Freeman, Michael. *Mastering Color Digital Photography*. New York: Lark Books, 2006.

George, Chris. *Mastering Digital Flash Photography*. New York: Lark Books, 2008.

Heiferman, Marvin. *Photography Changes Everything*. New York: Aperture Foundation, 2012.

Kelby, Scott. *How Do I Do That in Lightroom?* Santa Barbara, California: Rocky Nook, Inc., 2015.

Peterson, Bryan with Susana Heide Schellenberg. *Understanding Color in Photography: Using Color, Composition, and Exposure to Create Vivid Photos*. New York: Watson-Guptill, 2017.

DVD/Videos.

American Experience: Ansel Adams (2003: 90 minutes)

Annie Leibovitz: Life Through a Lens (2008: 90 minutes)

Bill Cunningham New York: A Film by Richard Press (2014: 84 minutes)

Dorothea Lange: Grab a Hunk of Lightning (2014: 105 minutes)

Finding Vivian Maier (2014: 90 minutes)

Getting Started in Digital SLR Photography: On Location with Adam Barker (2011: 85 minutes)

Henri Cartier-Bresson: The Impassioned Eye (2006: 72 minutes)

Visual Acoustics: The Modernism of Julius Shulman (2009: 83 minutes)

Websites.

Free On1 Presets for Adobe Camera Raw

<https://www.on1.com/free/camera-raw-presets/>

(2024) Review of photographic processing applications:

<https://shotkit.com/photo-editing-software/>

(2025) Review of photo editing software:

<https://www.digitalcameraworld.com/buying-guides/the-best-photo-editing-software>

(2025) Blog about photo editing software with specific examples and applications:

<https://www.digitalphotomentor.com/photo-editing/>

Limited/brief galleries of some famous photographers:

<http://www.masters-of-photography.com/summaries.html>

Reviews of digital cameras and equipment:

<https://www.dpreview.com/>

(2025) Image comparisons for different cameras by DPReview

https://www.dpreview.com/reviews/image-comparison/fullscreen?attr18=daylight&attr13_0=sony_a7rv&attr13_1=canon_eosr5&attr13_2=fujifilm_gfx100_studio&attr13_3=sony_a7riv&attr15_0=raw&attr15_1=raw&attr15_2=raw&attr15_3=raw&attr16_0=6400&attr16_1=6400&attr16_2=6400&attr16_3=6400&attr126_0=1&attr126_1=1&attr126_2=1&attr126_3=1&attr199_0=1&attr199_1=1&attr199_2=1&attr199_3=1&normalization=full&wiget=863&x=-0.5267438&y=0.3310655

Photography Glossaries:

<https://greatbigphotographyworld.com/glossary-of-photography-terms/>

<https://www.wix.com/blog/photography/photography-terms-glossary>

<https://conservationvisuals.com/tutorials/photography-terms/>

Online photo galleries:

<https://www.nationalgeographic.com/photography/>

<https://www.colorawards.com/gallery/17thannual>

<https://www.photoawards.com/winner/index.php?compName=IPA+2024>

<https://musephotographyawards.com/winner.php>

<https://annualphotoawards.com/winners/annual-photography-awards-2023/grand-prize/>

<https://px3.fr/winners/px3/2024/>

https://blackboxgallery.com/Exhibition_Page.html

<https://newyorkphotographyawards.com/winner.php>

<https://monoawards.com/>

Also: Flickr, Unsplash, and Instagram (but these are not curated)

Hardware/Software.

Weston 650 is available throughout the semester for use by students. The room is accessible 24/7 during the semester (including recess of spring classes in March) but students may NOT enter the room when it is being used by another scheduled class. The Lab includes Xencelabs touch screens which may be used conventionally with the supplied mice. Students who wish to draw directly on the tablet may borrow pens. Pen technology tends to be proprietary and these pens are not interchangeable with the stylus used for Wacom tablets that are present in other HCAD labs.

Software for post-processing images and RAW files in the lab includes both *Adobe Photoshop* and *Adobe Lightroom CC* as well as *Corel PaintShop Pro*. Students may, at their discretion, purchase and download on their own studio machines other image editors like *On1 Photo Raw* or *Luminar Neo*, either of which provides enhanced capabilities and increased ease of use when post-processing photographs. For those with a personal subscription to *Adobe CC*, you will find that *On1 Photo Raw* and *Luminar Neo* both work as plug-ins to Photoshop. Also available are other powerful plug-ins like DXO/Nik filters and *Topaz Gigapixel* (for enlarging photos/increasing resolution) and *Topaz Photo AI* (which includes a very effective noise reduction plug-in). If you look around, you will find other single-purpose or limited plug-ins available (like *PictoColor iCorrect* *EditLabs* or a collection available from *Franzis Software*) that may help processing photographs.

UNLESS TOLD OTHERWISE, BRING YOUR CAMERA TO CLASS.

BACK UP ALL FILES. BACK UP ALL FILES. BACK UP ALL FILES. BACK UP ALL FILES. BACK UP ALL FILES. BACK UP ALL FILES.