

Foundations of Digital Imaging and Visualization

Introduction to digital content creation, manipulation, transmission, and critical inspection

Spring 2019 | Mon/Wed 3:30–5:00pm | DFA 4.126

INSTRUCTOR: Greg Hervey - ghervey@utexas.edu

Office Hours (BY APPOINTMENT): M/W 5:00-5:30pm, and T/TH 7:30-8:00am

CLASS WEBSITE: canvas.utexas.edu

COURSE OVERVIEW

Develop foundational skills in visual communications using industry standard software, and exploration of elements and principles of design, including color theory, composition and typography. Project-based technical overview of vector and raster graphics, video, and motion graphics.

By utilizing industry-standard software, digital cameras, and a vocabulary of the art and technology within our culture, this course will enable students to make educated technological and conceptual decisions on how to explore and utilize digital technology within their own creative and technical career.

Research and practice outside of classroom hours is mandatory. The pages —and linked content— of the course website are required reading (there is no required textbook). Other than grading and attendance policies, parts of this syllabus are subject to change with advance notice, as deemed necessary by the instructor.

COURSE MODULES

Digital Imaging & Design (Adobe Photoshop, image editing, image resolution, digital image/video capture, color space, and printing): Development of basic digital image editing skills with digital exploration into both static and temporal space. Introduction to elements and principles of design.

Vector Graphics, Iconography and Typography (Adobe Illustrator, vector vs. raster space, layout and typography): Exploration into vector vs. raster, digital file formats, introduction to typography.

Non-linear Video Editing (Adobe Premiere Pro, storyboarding, digital cinematography, digital presentation, and transmission): Exploration into digital video, capture, editing, manipulation, transmission and presentation in technical and creative capacities.

Motion Graphics (Adobe After Effects, digital rotoscoping, and 2D Animation): Development of traditional and digital animation skills, keyframing and motion tracking, compression theory, digital animation workflows, and practical storyboarding.

COURSE REQUIREMENTS

- Personal Laptop (DFA computers have Adobe software; but you will need access outside of lab & library hours)
- Adobe Creative Cloud (UT student price: \$75/yr at [CampusComputer.com](https://campuscomputer.com))
- Internet access and a working email address (class notifications, assignments, and quizzes will all be administered through Canvas)
- High capacity USB storage and/or Cloud Storage (Dropbox, Google Drive, Box, etc. UT students have free Box access)

*****backup of your data is solely your responsibility and should be done frequently to avoid loss of any work*****
“My computer crashed” or “my files got corrupted” is the 21st century equivalent of “the dog ate my homework”

LEARNING OBJECTIVES

By the end of the course, students should:

- understand technical parameters of digital images and digital video,
- recognize the pros and cons of vector and raster images, and the related file formats,
- identify and employ the Principles of Design and fundamentals of visual composition,
- be conversant in color theory and typography,
- demonstrate foundational skills in Adobe Photoshop, Illustrator, Premiere, and After Effects

CALENDAR

Dates and lecture topics are subject to change. Calendar is provided for overview purposes only.

DATE	MODULE/TOPIC/PROJECT	POINTS (260 TOTAL)
Jan 23	MODULE 1: Introduction to Digital Imaging	
Jan 28	Introduction to Photoshop	
Jan 30	Principles of Design & Color Theory	
Feb 4	EXERCISE 1a: 4 Principles of Design	10
Feb 6	Composition / Classroom exercise	
Feb 11	EXERCISE 1b: Montage	20
Feb 13	Module 1 Quiz	20
Feb 18	MODULE 2: Introduction to Vector Graphics	
Feb 20	Introduction to Adobe Illustrator	
Feb 25	EXERCISE 2a: Drawing in Illustrator	10
Feb 27	Introduction to Typography	
Mar 4	Iconography	
Mar 6	EXERCISE 2b: InfoGraphic	30
Mar 11	(no lecture; studio time for ex. 2b)	
Mar 13	Module 2 Quiz	20
Mar 25	MODULE 3: Introduction to Digital Video	
Mar 27	Storyboarding/Spring Break assignment overview	
Apr 1	Introduction to Adobe Premiere	
Apr 3	EXERCISE 3a: inside/outside video sequence	10
Apr 8	Lumetri color correction, creating credits	
Apr 10	EXERCISE 3b: video narrative	40
Apr 15	Module 3 Quiz	20
Apr 17	MODULE 4: Motion Graphics	
Apr 22	Introduction to Adobe After Effects	
Apr 24	EXERCISE 4a: animated logo	10
Apr 29	Rotoscoping	
May 1	EXERCISE 4b: Machine	50
May 6	(no lecture; studio time for ex. 2b)	
May 8	FINAL QUIZ	20

GRADING

Your final grade in this course will be the total of four module grades (above), and a fifth 'professionalism' grade. The professionalism grade is determined by attendance, punctuality, participation, supererogation (pushing yourself beyond minimum requirements), and completion of three mandatory Lynda.com videos (on Photoshop, Illustrator, and After Effects) and their corresponding exercises. The Professionalism grade is 70 points, for a maximum point total of 330 for the course.

Grading in a creative course is inevitably subjective, meaning that the final evaluation of work presented is based on how the criteria for assignments is met, and instructor assessment of the work's quality (Creativity, Technical Execution, and Effectiveness of the Solution). Each student will be graded on an individual basis, not relative to other students.

Grades are calculated as a percentage ($\text{POINTS EARNED} \div 330$) $\times 100$. **A** = 100–93%, **A–** = 92.9–88%, **B+** = 87.9–83%, **B** = 82.9–78%, **B–** = 77.9–73%, **C+** = 72.9–69%, **C** = 68.9–66%, **C–** = 65.9–63%, **D+** = 62.9–60%, **D** = 59.9–56%, **D–** = 55.9–50.1%, **F** \leq 50%.
(The University does not recognize the grade of A+)

Late or incomplete work will seriously affect your grade. If you feel you may not be able to complete all work on time, you should ask me for a grade of Q, or drop before the deadline for doing so passes (see *Q drop Policy*, below).

ATTENDANCE POLICY

Attendance and use of the full class period is expected. You are required to arrive to class on time. **Four absences will drop your final grade by one letter grade.** Each additional absence beyond that will result in an additional one-half letter grade drop. If a medical or personal situation affects your attendance or punctuality, please discuss it with me ASAP. Absences, tardiness and/or early departures will adversely affect your Professionalism grade (and when excessive, may result in failing the course).

Roll will be called daily. If you don't hear your name, arrive late, or are out of the room during roll call, it is your responsibility to contact me or the TA **that day** to ensure your attendance is recorded (you cannot contest your attendance record later in the semester).

Q drop Policy The State of Texas has enacted a law that limits the number of course drops for academic reasons to six (6). As stated in Senate Bill 1231: "Beginning with the fall 2007 academic term, an institution of higher education may not permit an undergraduate student a total of more than six dropped courses, including any course a transfer student has dropped at another institution of higher education, unless the student shows good cause for dropping more than that number."

UNIVERSITY ATTENDANCE POLICY: RELIGIOUS HOLY DAYS

By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, I will give you an opportunity to complete the missed work within a reasonable time after the absence.

USE OF E-MAIL FOR OFFICIAL CORRESPONDENCE

All students should become familiar with the University's official e-mail student notification policy. It is the student's responsibility to keep the University and instructor(s) informed as to changes in his/her e-mail address. **Students are expected to check e-mail on a frequent and regular basis** in order to stay current with University-related communications, recognizing that certain communications may be time-critical. The complete text of this policy and instructions for updating your e-mail address are available at <http://www.utexas.edu/its/help/utmail/1564>

CLASSROOM AND CLASS WEBSITE

The class will be held in the lab located in DFA 4.126. All technical demos and class work will be held in the Lab. The lab is locked outside of classroom hours. Additional computers with Adobe software are available on the 3rd floor of DFA. I use Canvas to distribute course materials, communicate and collaborate online, post grades, receive your assignments, and to give you online quizzes and/or surveys. You can find support for using Canvas at <https://canvas.utexas.edu/>

SERVICES FOR STUDENTS WITH DISABILITIES

Any student with a documented disability who requires academic accommodations should contact Services for Students with Disabilities (SSD) at (512) 471-6259 (voice) or 1-866-329-3986 (video phone). Faculty are not required to provide accommodations without an official accommodation letter from SSD.

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact Services for Students with Disabilities (512-471-6259, ssd@austin.utexas.edu, <http://ddce.utexas.edu/disability/>, or videophone 512-471-6644). Please provide documentation of your needs during the first week of class, so that I can make the necessary accommodations promptly.

ACADEMIC HONESTY

University of Texas Honor Code The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the University is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

Use of Class Materials The materials used in this class, including, but not limited to, exams, quizzes, and homework assignments are copyright protected works. Any unauthorized copying of the class materials is a violation of federal law and may result in disciplinary actions being taken against the student. Additionally, the sharing of class materials without the specific, express approval of the instructor may be a violation of the University's Honor Code and an act of academic dishonesty, which could result in further disciplinary action. This includes, among other things, uploading class materials to websites for the purpose of sharing those materials with other current or future students.

COPYRIGHT AND FAIR USE

Understanding the basic principles of copyright and fair use is of critical importance to designers. Many of the uses we will make of text, images, and videos will be covered by the doctrine of Fair Use. However, as creators, you need to be aware of your own and other copyright holders' legal rights, and to properly identify and license your own and others' works. We will discuss these issues as needed. A useful resource is the Copyright Crash Course, available at <http://copyright.lib.utexas.edu/>.

BEHAVIOR CONCERNS ADVICE LINE (BCAL)

If you are worried about someone who is acting differently, you may use the Behavior Concerns Advice Line to discuss by phone your concerns about another individual's behavior. This service is provided through a partnership among the Office of the Dean of Students, the Counseling and Mental Health Center (CMHC), the Employee Assistance Program (EAP), and The University of Texas Police Department (UTPD). Call 512-232-5050 or visit <http://www.utexas.edu/safety/bcal>.

EMERGENCY EVACUATION POLICY

Occupants of buildings on the UT Austin campus are required to evacuate and assemble outside when a fire alarm is activated or an announcement is made. Please be aware of the following policies regarding evacuation:

- Familiarize yourself with all exit doors of the classroom and the building. Remember that the nearest exit door may not be the one you used when you entered the building.
- If you require assistance to evacuate, inform me in writing during the first week of class.
- In the event of an evacuation, follow my instructions or those of class proctors/TAs. After evacuation, do not leave the vicinity without checking in with me or our TA.

Do not re-enter a building unless you're given instructions by the Austin Fire Department, the UT Austin Police Department, or the Fire Prevention Services office.

CAMPUS CARRY

The concealed carry of handguns by permit holders is generally allowed in outdoor areas, as well as buildings and spaces that are accessible to the public. Permit holders are allowed to carry in classrooms.

It is the responsibility of concealed-carry license holders to carry their handguns on or about their person at all times while on campus. "About" the person means that a license holder may carry a holstered handgun in a backpack or handbag, but the backpack or handbag must always be close enough that the license holder can grasp it without materially changing position. The holster must completely cover the trigger area and have enough tension to keep the gun in place if jostled. **A license holder may not carry a partially or wholly visible handgun on campus premises** or on any university driveway, street, sidewalk or walkway, parking lot, parking garage, or other parking area.

The open carry of handguns is not permitted on campus. Anyone who sees an openly carried gun on campus should immediately call 911. (from <https://campuscarry.utexas.edu/students>)

CELL PHONES

You must silence your cell phone in class (if your phone interrupts my class, you owe me a Frappuccino™). Texting or social networking in class—even during free lab time—is prohibited.