

AET306 Foundations of Digital Imaging and Visualization

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

Fall 2018 | Mon/Wed 2:00-3:30pm | MRH 3.124

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Class website: canvas.utexas.edu

COURSE OVERVIEW

By utilizing contemporary computer graphic 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.

This course will develop concepts and skills by addressing assigned conceptual problems. These project modules will help the student creatively consider the interaction of media, imagery, composition, content, and digital manipulation methods, and apply such using industry standard tools.

Research and practice outside of the specified class time is mandatory. Other than grading and attendance policies, parts of this syllabus are subject to change with advance notice, as deemed necessary by the instructor.

PROJECT MODULES

Sequence and Imagery (Adobe Photoshop, image editing, image resolution theory, digital image/video capture, color space, and printing): Development of basic digital image editing skills with digital exploration into both static and temporal space.

Iconography and Image (Adobe Illustrator, visual synthesis, vector vs. raster space, layout design and typography): Exploration into vector vs. raster file manipulation, digital file formats, digital multi-tasking, and digital printmaking.

Temporal Space (Adobe Premiere Pro, non-linear digital video editing, 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, 2D Animation, and storyboarding): Development of traditional and digital animation skills, keyframing and motion tracking, compression theory, digital animation work flows, and practical story boarding.

COURSE REQUIREMENTS

- Personal Laptop (From your admissions advising)
- Drawing Tablet and Stylus (Wacom or similar)
- Internet Access and a Working E-mail Address
- Adobe Creative Cloud (UT student price: \$75/yr at CampusComputer.com)
- USB Flash/Thumb drive(s) and/or Portable External hard disk drive(s)
- Cloud Storage Access (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 digital image resolution, color modes, and standard image file formats
- understand pros and cons of vector and raster image formats
- recognize and employ the Elements and Principles of Design
- know the standard typographic categories and terms
- understand video framerate, codecs and animation terminology
- demonstrate foundational skills in Adobe Photoshop, Illustrator, Premiere, and After Effects

GRADING POLICY

Your final grade in this course will be the total of four module grades, and a fifth 'professionalism' grade. The module grades will be based on timely completion of projects, assignments and quizzes. The professionalism grade is determined by attendance, punctuality, and participation.

Grading in a creative course is inevitably subjective, meaning that the final evaluation of the 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 by $(\text{POINTS EARNED} \div \text{MAXIMUM POSSIBLE POINTS}) \times 4$ and mapped to a 4.0 scale (A= 3.01–4, B= 2.01–3, C= 1.01–2, D= 0.5–1).

CLASS ATTENDANCE POLICY

Attendance and use of the full class period is expected. You are allowed two absences during the semester without grading consequences. Being 15 or more minutes late to class three times, or leaving class before dismissed three times counts as an absence. Four absences will result in the lowering of your final grade by one letter grade. Absences, tardiness and/or early departures beyond this could result in course failure. If a serious medical or personal situation affects attendance, please discuss it with your professor.

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.

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."

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 MML lab located in MRH 3.124. All technical demos and class work will be primarily held in the MML. The lab has specific hours of operation and equipment rules. Please refer to MML's posted times and schedule. I use Canvas to distribute course materials, communicate and collaborate online, post grades, receive your assignments, and to give you online quizzes and surveys. You can find support for using Canvas at <https://canvas.utexas.edu/>

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.

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.

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 lab time—is prohibited.