

USC Iovine and Young Academy

*Arts, Technology and the Business
of Innovation*

ACAD 178 - Digital Toolbox: Motion Graphics

Units: 2

Day-Time: Fall 2023, Tuesday/Thursday, 12:00pm - 1:20pm

Location: IYH 212

Instructor: Aaron Siegel

Office: IYH Lobby or Zoom meeting room listed on Blackboard.

Office Hours: TBD.

Contact Info: aaronsie@usc.edu

IT Help:

<https://uscedu.sharepoint.com/sites/IYAStudent/SitePages/IT-Resources.aspx>

Hours of Service: M-F, 8:30am - 6:30pm

Contact Info: iya.helpdesk@usc.edu, 213-821-6917

Course Description

ACAD 178 - Motion Graphics intends to introduce students to tools for the creation of video based graphic animation using Adobe After Effects. Students will concentrate on conceptual elements of animation, visual composition, graphic design, timing, color, typography, tracking, rotoscoping, and video compositing.

Learning Objectives and Outcomes

1. Understand concepts and principles related to visual composition, typography, timing, video compositing, rotoscoping, and motion tracking.
2. Learn the fundamentals of linear animation and digital video manipulation.
3. Become familiar with the history of motion graphic design for film and television titles.
4. Develop creative ideas around the implementation of patterns, typography, and video.

Prerequisite(s): None.

Co-Requisite(s): None.

Concurrent Enrollment: None.

Recommended Preparation: Have Adobe After Effects installed prior to the first day of class.

Course Notes

The class will be a mix of technical demonstrations, software workshop exercises, lectures on the history and contemporary applications of motion graphics, as well as collective critique sessions. Technical demonstrations may be recorded and shared with the students afterward for further review. Lecture materials will be made available on Blackboard or via class email.

Technological Proficiency and Hardware/Software Required

- Laptop computer with authorized installations of Adobe After Effects, Illustrator, Photoshop, and Audition.

Supplementary Learning Materials

- [Mark Christiansen - After Effects CC 2021 Essential Training: The Basics](#)
- [Alan Demafiles - After Effects CC 2021 Essential Training: Motion Graphics](#)
- [Alan Demafiles - After Effects CC 2021 Essential Training: VFX](#)

Assignments

1. **Project #1: Top Five Title Sequences (10%)**
 - Visit Art of the Title and select five of your favorite title sequences from the site (if you have a personal favorite that is not on the site, go ahead and include it from a different source like youtube or vimeo), and write a short description for each one (100 - 200 words) outlining the characteristics you like about it. Include a screenshot from the title sequence and a link to the corresponding video or art of the title page for each entry.

2. **Project #2: Looping Animation (20%):**
 - Create an animated composition following the description and guidelines in the rubric. The description and guidelines must be followed explicitly, but any room for interpretation is encouraged to be played with.

3. **Project #3: Kinetic Typography (20%):**
 - Use 8, 16, or 20 lyrical measures of a song (ie: a verse) to create a short video (around 30 seconds in length) using kinetic typography animated in sync with the music following the description and guidelines in the rubric. Use After Effects and the various text, shape and effects tools to implement the appropriate styles and animations to match the style of music and content of the lyrics.

4. **Project #4: Interface Mockup (20%):**
 - Use rotoscoping, tracking, and compositing techniques to create a short (around 10 second) video of a fictional graphic user interface experience, either touchscreen/surface based or holographic (think Minority Report or Tron 2). Your interface should be an original design that you have created in Adobe Illustrator and After Effects, and the footage of the user interaction should be original footage you film yourself.

Grading Breakdown		Grading Scale		
Top Five Title Sequences	10%		A = 100 - 95	A- = 94 - 90
Looping Animation	20%	B+ = 89 - 87	B = 86 - 83	B- = 82 - 80
Kinetic Typography	20%	C+ = 79 - 77	C = 76 - 73	C- = 72 - 70
Interface Mockup	20%	D+ = 69 - 67	D = 66 - 63	D- = 62 - 60
Quizzes (5% x4)	20%	F = 59 and below		
Participation (24 in-class lab exercises)	10%			

Weekly Class Schedule

Week	Tuesday	Thursday
1	8/22: Syllabus / Schedule / Assignments. Timeline, Layers, Keyframes. Exporting and Compressing Media. <i>LAB #1: Ball Bounce</i>	8/24: After Effects Interface. Shape Layers. <i>LAB #2: Ball Bounce and Roll</i>
2	8/29: DUE: Project #1: Top Five Title Sequences. Shape Layer Modifiers, Layer Styles. Footage, Compositions, Assets. <i>LAB #3: Shape Modifier</i>	8/31: Illustrator Pipeline. Importing Illustrator files as Compositions. <i>LAB #4: Imported Illustrator Graphics</i>
3	9/5: DUE: Quiz #1: After Effects Basics Photoshop Pipeline. Importing Photoshop files as Compositions. <i>LAB #5: Imported Photoshop Graphics.</i>	9/7: Track Mattes and Masks. <i>LAB #6: Masked Animation</i>
4	9/12: Nesting Compositions. Parent/Child Layer Relationships. Motion Blur. <i>LAB #7: Parent / Child Animation</i>	9/14: DUE: Project #2: Looping Animation. Presentations & Critique.
5	9/19: Text Layers, Text Styles. Snapping & Alignment. <i>LAB #8: Text Property Animation</i>	9/21: Text Effects and Animation Presets. <i>LAB #9 Text Animation Preset</i>
6	9/26: Audio in Audition & After Effects. Audio Analysis. <i>LAB #10: Audio Visualizer</i>	9/28: Expressions. <i>LAB #11: Expressions</i>
7	10/3: DUE: Quiz #2: After Effects Features 3D Transforms. <i>LAB #12: 3D Transforms</i>	10/5: Lights. Materials. <i>LAB #13: Lights & Materials</i>
8	10/10: Cameras. <i>LAB #14: Camera Movement</i>	10/12: Fall Recess: NO CLASS!
9	10/17: Cameras. <i>LAB #15: Depth of Field</i>	10/19: Cinema4D Renderer. Extruded Geometry. <i>LAB #16: Extruded Geometry</i>
10	10/24: Raytracing, Reflections. <i>LAB #17: Raytraced Materials</i>	10/26: DUE: Project #3: Kinetic Typography. Presentations & Critique.

11	10/31: DUE: Quiz #3: After Effects Features Chroma Key. <i>LAB #18: Chroma Key</i>	11/2: Rotoscoping. <i>LAB #19: Rotoscope Footage w/ Rotobrush</i>
12	11/7: Rotoscoping. <i>LAB #20: Rotoscope Footage w/ Vectors</i>	11/9: One-Point Motion Tracking. <i>LAB #21: One-Point Tracking</i>
13	11/14: Four-Point Motion Tracking. <i>LAB #22: Four-Point Tracking</i>	11/16: Footage Stabilization and Camera Tracking. <i>LAB #23: Footage Stabilization and Camera Tracking</i>
14	11/21: Footage Effects. <i>LAB #24: Footage Effects</i>	11/23: Thanksgiving: NO CLASS!
15	11/28: DUE: Quiz #4: After Effects Features Working session / One-on-one meetings.	11/30: Movie screening day!
FINAL	FINAL DUE: Tuesday, December 12th , 11am - 1pm: Project #4: Interface Mockup. Presentations & Critique.	

HOW TO PURCHASE SOFTWARE AT THE DISCOUNTED ACADEMY RATE THROUGH THE USC BOOKSTORE:

The following first year software are now available for purchase online through the USC Iovine and Young software catalog at the Academy discounted rate:

<u>Software</u>	<u>IYA Short-Term License at USC Bookstore</u>
Adobe Creative Cloud	\$70 2023-2024 annual license (active through July 2024)

To purchase:

- Visit: <https://commerce.cashnet.com/IOVINE>
- Select the software license(s) you would like to purchase by clicking “View Details” or the software title, and make your purchase.
- You will receive an order confirmation receipt at the email address you provided.
- You will be notified by email when the software license has been activated.

If you have any questions about this process, please do not hesitate to contact Academy IT Support at iyahelp@usc.edu.

Assignment Rubrics

Student work will be assessed based on:

- Level of understanding and execution of software skills on assignments.
- Degree of complexity of the assignment goal both creatively and technically.
- Innovative application of tools and concepts covered in class.

Assignment Submission Policy

Submit all of your digital assets for your assignments via the team Google Drive at least one hour prior to the start of the class session. Make sure you submit the original project file (After Effects project file and resources) as well as a static exported file (compressed .mp4 using h.264 or h.265 compression). Each in-class lab exercise is due at midnight of that class day and will count towards your participation credit.

Templates or plugins are not allowed on any assignments or in-class lab exercises. Unless otherwise noted, all work (including images, illustrations, and footage) must be created from scratch by you.

Grading Timeline

Checkpoints and assignments will be reviewed, graded, and provided with feedback within a week of submission.

Course Attendance Policy

The Academy maintains rigorous academic standards for its students and on-time attendance at all class meetings is expected. Students remain responsible for any missed work from excused or unexcused absences. Immediately following an absence, students should contact the instructor to obtain missed assignments or lecture notes and to confirm new deadlines or due dates. Extensions or other accommodations are at the discretion of the instructor.

Excused absences normally may not be used for quiz, exam or presentation days. Using an excused absence for a quiz, exam or presentation, such as in the case of sudden illness or other emergency, is at the discretion of the instructor.

In the case of prolonged illness, family emergencies, or other unforeseen serious issues, the student should contact the instructor to arrange for accommodation. Accommodation may also be made for essential professional or career-related events or opportunities. All accommodations remain at the discretion of the instructor, and appropriate documentation may be required.

Course Content Distribution and Synchronous Session Recordings Policies

USC has policies that prohibit recording and distribution of any synchronous and asynchronous course content outside of the learning environment.

Recording a university class without the express permission of the instructor and announcement to the class, or unless conducted pursuant to an Office of Student Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future, and thus infringe on the academic freedom of other students as well as the instructor. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

Distribution or use of notes, recordings, exams, or other intellectual property, based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study. This includes but is not limited to providing materials for distribution by services publishing course materials. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the internet, or via any other media. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

Participation

Students are expected to actively participate in this course. In an online forum, participation includes:

- Careful reading and viewing of assigned materials by the date due
- Regular, substantive contributions to discussions
- Active engagement with online content
- On-time attendance and full attention in synchronous sessions

- Significant collaboration with classmates and teammates

Course grades may be affected for students who do not contribute to the course through active participation. Students should notify the instructor in advance if they are unable to attend class. Those unable to attend will be required to review the online recording for the session missed, and submit thoughtful feedback to the Instructor.

Statement on Academic Conduct and Support Systems

Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the [USC Student Handbook](#). All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see the [student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Policy for the use of AI Generators

Since creating, analytical, and critical thinking skills are part of the learning outcomes of this course, all assignments should be prepared by the student working individually. Students may not have another person or entity complete any substantive portion of the assignment. Developing strong competencies in these areas will prepare you for a competitive workplace. Therefore, using AI-generated tools is prohibited in this course, will be identified as plagiarism, and will be reported to the Office of Academic Integrity.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. [The Office of Student Accessibility Services \(OSAS\)](#) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.