AAV 356: MOTION GRAPHICS

Learning Goals

(AAV 356) Motion Graphics is a required course for the digital track graphic design students. Students take it in the first semester of their junior year after they have accumulated in-depth understanding of design principles as well as software skills from their sophomore level courses. It builds upon a strong foundation of graphic design core courses, and then allows students to narrow and intensify their problem solving skills as they further their understandings on how visual communication takes place in time based media. This course provides an opportunity to integrate relevant traditional medium with new digital knowledge. While this course is primarily a project based studio course, the students will also investigate the history, principles, and contemporary issues of motion graphics. The class will look at how graphic designers convey visual information in professional practice. Five major projects will be assigned along with additional in-class exercises. Class time will be divided between screenings and discussions, lectures and tutorials, short in-class exercises and lab time. A broad range of projects will allow students to explore and experiment with motion graphics and the moving image. Students will gain proficiency in working with motion graphics and apply their skills in the three-course capstone sequence which starts in the second semester of the junior year.

Student Assessment

Student work will be assessed on planning and executing motion graphics projects, writing and research skills, class critiques, and class participation. Each motion graphic project will require a planning and ideation stage. This will require students to create storyboards and presentations about their initial ideas. The planning stage will assess the student's ability to plan motion graphics projects, create realistic projects and timelines, solve execution problems while trying to implement their ideas, and integrate the feedback of others. The in-class assignments will improve their aptitude to apply technical skills and screenings and to evaluate each student's ability to research current trends in motion graphics. Critiques will provide opportunities for students to present skills and ideas and to critically evaluate peer work. The student's reading and writing abilities will be assessed through the completion of an assignment related research paper. Class participation will also include in-class assignments and student curated video screenings. At the end of the semester, students will participate in a presentation of their final work and portfolio review. The final portfolio review will evaluate the student coursework and provide individualized guidance about how the student might proceed with motion graphics after the course has ended.

Learning Activities

The class content will be delivered through lectures, tutorials, and in-class exercises, with emphasis on basic principles, ideation, and experimentation. As the first and the only course in the area of motion graphics, it introduces the tools and methodology, and more importantly, the design principles of time-based graphic design which advances their problem solving skills to be successful in their capstone courses. Each motion graphics project will require a planning and ideation stage. This stage will require students to make storyboards and pitch their ideas to the class. Motion graphics and animation techniques will be introduced. The students will observe and discuss daily screenings of seminal and contemporary examples of animation and motion graphics.

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PURPOSE STATEMENT

AAV 356 is a course designed for 3rd year graphic design students in the digital media track. It builds upon the knowledge students have obtained from 4D, Web 1, Typography, and Conceptual Image. This course introduces motion graphics within the discipline of graphic design. It focuses on the research methods, planning, and methodology to design motion graphics for video, web, and other digital media by using Adobe After Effects, Premiere Pro, and related software. The course objective is to help students to create effective design for time based media. The students will gain knowledge on the most up-to-date technology, as well as contextual understanding of how moving images can unfold information to the viewers over time. Through class discussion, lectures, and creative projects, students will develop their unique personal visions in the area of motion graphics within the graphic design discipline, cultivate a sense of social responsibility as designers, and contribute to our mass culture through social media as they become creators and interpreters of the environment in which we live. They will also be able to adapt to changing technological demands of the fast growing design profession.

COURSE DESCRIPTION

AAV 356 provides conceptual, theoretical, and technical problem solving skills in time-based media within the profession of graphic design. It prepares students to be creative, collaborative, and critical so that they can succeed in the competitive design profession. As the assignments bridge the traditional media of drawing, illustration, photography, and time based media such as sound, video, and animation; it is an interdisciplinary course that is rooted in the foundations of graphic design. Throughout the semester, students will work primarily in After Effects by importing texts and vector graphics from Illustrator, photographs and scanned images from Photoshop, video and sound from Premiere. Demos on software and other techniques will be introduced to ensure that students have the sufficient technical skills to execute their ideas. Each motion graphics project will require brainstorming, research, planning, and the incorporation of storyboards to communicate their ideas.

In addition to the creative components, the class content will be delivered through lectures, class discussion, and student screenings with an emphasis on visual communication principles and experimentation. Design history in both print and time based media will be given to put motion graphics into the context of the entire historical development of graphic design. Terminology on motion graphics, animations, and video production will also be given. The students will watch and discuss daily screenings of seminal and contemporary examples of motion graphics.

COURSE PREREQUISITES

(Requires proficiency in Photoshop, Illustrator and experience in Premiere)

1. AAV 130: Photo 1
2. AAV 140: 4D
3. AAV 250: History of Graphic Design
4. AAV 251: Design Fundamentals
5. AAV 252: Typography
6. AAV 253: Conceptual Image

7. AAV 255: Web 1

REQUIRED MATERIALS:

- 500GB or larger external hard drive.
  (Recommended 7200 rpm with Fire wire 800 or USB 3.0 or Thunderbolt depending on available computer ports and connections).
- Headphones are recommended while working on video projects with audio.
- Digital Camera (still and video can be checked out within the college).
- Based on the extent of a student's project, there may be an additional cost for materials.

REQUIRED TEXTBOOKS:

- *A subscription of Lynda.com*
- *Motion Graphic Design: Applied History and Aesthetics,* Jon Krasner ISBN-13: 978-0240821139 | Edition: 3

COURSE OBJECTIVES

Content Goals

AAV 356 Motion Graphics provides conceptual, theoretical, and technical problem solving skills in the field of visual communication with a specialization in time based media. It prepares students to be creative, collaborative, and critical so that they can succeed in the competitive digital design profession. Furthermore, lectures and assignments focusing in motion graphics; the course will also investigate how related media, such as photography, video, sound, illustration, and typography communicate in our culture. Students will develop their personal vision and cultivate a sense of social responsibility as designers and adapt to changing cultural and technological demands of the fast growing design profession.

This is a project-driven course. This course will provide skills in ideation, planning, methodology, problem solving, and innovative use of software in order to execute the assigned motion graphic assignments. Lectures on the history of animation, motion graphic techniques using After Effects, video codec and compression, video distribution and display, storyboarding and project planning will also be given.

Performance Goals

Upon successful completion of the course, students will be able to:

1. Describe the design theory and principles of motion graphics.
2. Identify leading motion graphic designers throughout history.
3. Demonstrate the ability to use After Effects in creating, animating, compositing, and out putting motion graphics for final productions or other delivery destinations as needed.
4. Create a motion graphics portfolio for professional use.

STUDENT ASSESSMENT

Five major creative assignments will be allocated along with additional in-class exercises, including, *Concrete Poetry, Holiday Greetings, Info Graphics, Clients Know Best,* and *Visual Communication through 3D forms, lighting, & Camera.* All of the creative projects provide students with the technical skills to dive into motion graphics work.

1. *Concrete Poetry* specifically investigates how moving texts affect legibility, readability, visual interest, and audience response in graphic design.
2. *Holiday Greetings* investigates how vector graphics, such as color, lines, shapes, and simple illustration communicate differently between the 2D and 4D environments.
3. *Info graphics* explores how traditional sequential design elements, such as grids, typographic hierarchy, and visual identity system carry through the time-based media.
4. *Client Knows Best* gives an opportunity for peer collaboration
5. The final assignment allows students to learn the advanced features of the software and integrate their skills into conceptual driven design solutions.

All of these creative assignments will be assessed by research, idea development, execution, class critiques, and class participation. Each motion graphic project will require a planning and ideation stage, which students need to create storyboards and presentations about their initial ideas. The planning stage will assess the students' ability to plan motion graphics projects, create realistic projects and timelines, and solve execution problems while trying to implement their ideas as well as to integrate the feedback of others. The project will also assess students' ability to implement and expand on techniques learned in class. The students will also have the opportunity to evaluate and critique their peers.

In addition to creative abilities, students' reading and writing skills will be assessed through the completion of an assignment related research paper. Class participation will also include in-class assignments and student curated video screenings. In-class assignments will evaluate the students' ability to implement technical skills. Screenings evaluate the students' ability to research current trends in motion graphics. At the end of the semester, students will participate in a presentation of their final work and final portfolio review. Final portfolio reviews will evaluate student coursework and provide individualized guidance about how the student might proceed with motion graphics after the course has ended.

Class time will be divided amid screenings, discussions, lectures, tutorials, class exercises and lab time. A broad range of class demos will allow students to explore and experiment with motion graphics and the moving image. In addition, students should gain a broader understanding of the history and concepts that underpin motion graphics work. Contemporary practice today provides many opportunities for motion graphics work. Technical and practical understanding of motion graphics is essential for contributing to the new media landscape.

Final assessment of performance will be based on assignment grades; including story-boards and other planning activities, research paper, class participation such as student screening and critique, as well as a final portfolio review.

Grading Breakdown:

Class participation/In-Class Exercise	20%
Student Screening	5%
Assignment 1: Concrete Poetry	10%
Assignment 2: Holiday Greeting	15%
Assignment 3: Info Graphics	10%
Assignment 4: The Client Knows Best?	15%

Final Project	15%
Research Paper	10%

COURSE REQUIREMENTS:

Student Screenings

For each class, one student will present two or three examples of design pieces he/she finds from popular online sources, such as YouTube, Vimeo, or Pinterest. The student will lead with 20 minutes of meaningful class discussion, and use it as a springboard to launch the class into the weekly lecture.

In-Class Exercises

In-class exercises will be given after class demos. These exercises will help reinforcing the techniques covered in the demos. In-class exercises will count toward the class participation grade.

Assignment 1: Concrete Poetry (Due: 4th Week)

Learning Goals:

This assignment will investigate how moving texts affect legibility, readability, visual interest, and audience response, as well as how expressive typography evolves throughout the history of graphic design. Technically, this assignment will introduce the students to the basic animation techniques and terminology, such as composition, layers, timeline, key frames, tweeting, effects, and rendering.

Lecture Components:

We will investigate the artistic, political, and social origins of concrete poetry, and how it has impacted graphic design since the 1920's. The expressive typographic work of the Futurist artists, such as Filippo Marinetti and Fortunato Depero will be discussed. We will also study the influences of the Bauhaus principles of color and shapes in modern graphic design. Afterwards, we will review examples of early animation and motion graphics from Norman McLaren, Oskar Fischinger, Hans Richter, Viking Eggeling, and The Whitney.

Project Requirements:

- Find a concrete poem from the books *An anthology of concrete poetry* by Emmett Williams (Call number: N6490.W48) or *Concrete poetry; a world view by Mary Ellen Solt*. (Call number: PN6110.C77 S6 1969) and use kinetic typography, primary colors and simple shape to replicate its poetic meaning in After Effects.
- Create a 10-20 second typographic driven solution.
- Design should stay simple but convey the idea creatively.
- Students must work on storyboards before working on the computers.
- Students are required to put the video online through Video or YouTube, therefore, file size should stay small

Evaluation Criteria:

40%	Concepts: Effectiveness of replicating the meanings, creativity, originality & rationality
10%	Static quality: typographic treatment, composition, color, scale & typography

30% Dynamic quality: sequencing, tempo, transition & interactivity
10% Effectiveness of utilizing the software
10% Efforts: development, progress, & preparation for classes, articulating the ideas during critiques & presentations

Research & Writing Assignment

Beside the creative project, students will write a 4-5 paged research paper to observe how kinetic typography has been executed throughout different eras, as well as how their research inspires their creative process and the final solution of Assignment 1. Include at least 5 references and have a separate works cited page using the MLA style internal documentation (http://libguides.tcnj.edu/content.php?pid=89000&sid=662420).

Here are some examples to get students started:

Saul Bass:	https://vimeo.com/41081918
	http://www.artofthetitle.com/title/north-by-northwest/
Evan Roth:	http://youtu.be/Za4DdpWORjs
	http://www.evan-roth.com/jay-z/
VFS:	http://youtu.be/14NY21zJcGo
Jacob Gilbreath:	https://vimeo.com/20534171
FNH:	http://www.fnh.mx/

Evaluation Criteria:

30% Research & preparation
40% Content
20% Writing & organization skills
10% Effort (Development, progress, & preparation for classes)

Assignment 2: Holiday Greeting (Due: 7th week)

Learning Goals:

This assignment investigates how illustration based design communicates differently between the 2D and 4D environments. The class lecture will start from looking at the ideas behind the expressionist paintings from Henri Matisse, Paul Klee, and Wassily Kandinsky; the image-driven design masterpiece from Paul Rand, Saul Bass, Seymour Chwast, and Milton Glaser; and well as the current illustrative motion graphics on the Internet. Additionally, the lecture will also examine how greeting cards differ from 2D (traditional flat cards), 3D (pop-up cards), to 4D (eCards).

Project Requirements:

- Students will design an 8-10 second motion design to describe a special event or holiday such as Christmas, Thanksgiving, Martin Luther King Day, or Graduation Day.
- This animation is meant to be placed on a company website along with a logo which would be used within the animation. (Keep the logo simple).
- The design must be rational and appeal to a group of target audience within the company.
- The design must be image-driven; use texts only as hints.
- Students are expected to import complex vector graphics from Illustrator.

- Using audio is optional.
- If clip art image is used, it needs to be altered from the original source.
- Students must work on storyboards before working on the computers.
- Students will render the image sequence at two dimensions.
  1280 x 720 px, mov format, Codec at H.264, frame rate at 29.97 fps
  640 x 360 px, animated gif, frame rate at 15 fps

Evaluation Criteria:

40% Concepts: effectiveness of conveying the message, creativity & originality
10% Static quality: composition, color, scale, proportion & typography
20% Dynamic quality: sequencing, tempo, transition & movement
20% Effectiveness of utilizing the software
10% Efforts: development, progress, preparation for classes, articulating the ideas during critiques & presentations

Assignment 3: Kinetic info graphics (Due: 9th week)

Learning Goals:

In this assignment, students will explore how traditional sequential design elements, such as grids, typographic hierarchy, and visual identity system carry through the time-based media. They will experiment on how to use time elements to alter reading, and to prioritize information into hierarchical orders. The lecture will investigate how grid systems were adopted by the printed based Swiss designers such as Josef Muller Brockmann and Otl Aicher from the 50's and 60's, as well as the current motion design from online news, such as CNN and The NY Times.

Project Requirements:

- Maintain a balance between design forms and content.
- Students will design a 10-second animation to summarize the content of a chapter from a grade school textbook.
- It must include a 2-3 second animated chart, table, or diagram.
- At least a hundred words of legible text are required to testify their kinetic typographic skills.
- Using audio is optional.
- Students must work on grids.
- For photographic imagery, only still image is allowed (no video).
- Found vector images should be altered if the content allows.
- Students are also encourages to integrate traditional image-making techniques such as scanning of drawing & painting into their anmation
- Students must work on storyboards before working on the computers.
- Students will render all of the reference footages as an image sequence at 1280 x 720 px, mov format, Codec at H.264, frame rate at 29.97 fps.

Evaluation Criteria:

40% Concepts: the balance between form and content
10% Static quality: consistency, typography, composition, color, scale
20% Dynamic quality: Sequencing, tempo, transition, movement, sound (if used)
20% Effectiveness of utilizing the software

10% Efforts: development, progress, & preparation for classes, articulating the ideas during critiques & presentations

Assignment 4: Clients know best (Due: 12th week)

Learning Goals:

The content goals of this assignment are three-folded. Firstly, it gives an opportunity for peer collaboration. Students will give critical inputs to their peers during the entire creative process. Secondly, the assignment will uplift practical problem solving skills for client based work. Thirdly, this assignment will also refine the students' video making skills from their previous coursework, AAV 140-4D.

Project requirements:

- Assumption: "You have been hired for your first motion graphics job. The client would like to see two completely different ideas of video to sell a product, service, or a concept, and then choose one of the two to refine the version they select."
- For this assignment, each student will be a 'client' and a 'motion graphics artist.' As a client, the student will decide the nature of the business and write a short description about what she/he is looking for. The message can be selling a product, providing a service, or even promoting a social campaign.
- As a motion graphics artist, the student will be assigned a client, and produce the following:
    - 2 raw video footages (no need to edit). The designer will also suggest to the client how the video would be delivered to their intended audience.
    - A 10-15 second final solution based on the client's feedback.
- Students can either shoot their own videos or use existing footage, but integrating moving graphical elements and/or typographic design to the video.
- Students are encouraged to integrate some advanced skills learned from the in-class exercises, such as green-screen compositing, roto-scoping, and other special effects that were covered in the class.
- Use of sound is required.

Evaluation Criteria

10% Collaboration between students
20% Client & marketing research
30% Concepts: effective communication, originality & rationality
10% Static quality: composition, color, scale, proportion & typography
10% Dynamic quality: sequencing, tempo, transition, movement & sound
10% Effectiveness of utilizing the software
10% Efforts: development, progress, & preparation for classes, articulating the ideas during critiques & presentations

Final Project: Communicate with using Special Effects, such as virtual 3D, lighting & camera (Due: Final exam)

Learning goals:

This assignment is intended to give students an opportunity to apply the advanced features of Adobe After Effects into a conceptual driven design solution. Compared to previous

assignments, this assignment is more technically driven. As computer graphics can enhance the effectiveness of visual communication, it can also make the design tacky and cliché. The class lecture will analyze a broad range of successful examples of special effects used in the current industry.

Project Requirements:

- Apply 3D rendering, camera, and lighting effects on one of the logos created in previous coursework. If students found their previous logos are not compatible, they can design a new one.
- The duration of the animation should be between 10 to 15 seconds.
- Integrating sound is optional.
- Looping is strongly recommended (the animation will have no start or end point).
- Before working on the assignment, students must apply critical thinking on what the special effects deliver during the process of visual communication.
- Beside the special effects we introduced in this assignment, students are also encouraged to integrate the skills they have learned during the semester into a project of their own design. Students can integrate text, video, photos, audio, and other graphical elements to communicate.

Evaluation Criteria:

40% Concepts: effective use of the visual effects
10% Static quality: composition, color, scale, proportion & typography
20% Dynamic quality: sequencing, tempo, transition, movement & sound
30% Advanced application of the software

CALENDAR

	ACTIVITIES
Week 1	- **Introduction to Course and Syllabus** - **Lecture: A brief history of moving image** - 30 mins demo: Interface of After Effects, compositions, layers, animation, rendering - Professional terminology part 1 - Sign up for weekly student screening - Screening: early and contemporary roto scoped animation: Muybridge, Max Fleischer, J. Stuart Blackton, Ralph Bakshi, Bob Sabiston, Joseph Pierce - Lab time: begin Assignment 1 - Reading: Chapter 10,*Conceptualization*, p338
Week 2	- **Lecture: The Bauhaus principles** - 30 mins demo: Importing Photoshop & Illustrator files, pre-compose, timeline buttons and switches, type layers - Professional terminology part 2

	- Screening: Student Curator 1 - Storyboard critique Assignment 1 - Lab time: Assignment 1 - Reading: Chapter 11, *Animation Processes*, p372
Week 3	- **Lecture: Early animation, Norman McLaren, Oskar Fischinger, Hans Richter, Viking Eggeling, and The Whitney** - 30 min demo: Layer solids, shape Layers, keyframes interpolation, keyframes graph editor, stop motion - Professional terminology part 3 - Screening: Student Curator 2 - In-progress critique: Assignment 1 - Lab time: continue Assignment 1 - Reading: Chapter 12, *Motion Graphics Compositing*, p414
Week 4	- **Lecture: Expressionist paintings influences on graphic design** - 30 mins demo: Parenting, null object, adding sound, timing animation to audio - Screening: Student Curator 3 &4 - Final Critique: Assignment 1 - Research paper due - Introduction of Assignment 2 - Reading: Chapter 13,*Motion Graphics Sequencing*, p448
Week 5	- **Lecture: greeting cards, pop up cards, and eCard** - **Lecture: Concept-driven image design, Rand, Bass, Chwast, & Glaser** - 30 Mins demo: Puppet tool, convert Illustrator file into native After Effect graphics, pickwhip - Screening: Example of Kinetic Typography: Saul Bass, Evan Roth, Jacob Gilbreath, Pablo Ferro - Screening: Student Curator 5 - Story board Assignment 2 - Lab time: Assignment 2 - Reading: Chapter 7,*Kinetic Images and Typography*, p204
Week 6	- **Lecture: Online news graphics** - **Lecture: Looking at elementary school's textbooks** - 30 mins demo: Animating strokes with effects, adjustment layers, gradient, track mattes - Screening: Student Curator 6 - In-Progress critique: Assignment 2 - Lab time: Refine storyboard and continue working on Assignment 3 - Reading: Chapter 8,*The Pictorial Composition*, p260
Week 7	- **Lecture: Origins of Grid based design, Swiss Designer such as**

	Joseph Muller Brockmann, and Otl Aicher - 30 min demo: Animating type on a paths, type animators, changing shape with animation - Screening: Student Curator 7 - Final Critique: Assignment 2 - Lab time: Start working on Assignment 3 - Reading: Chapter 9, *The Sequential Composition*, p302
Week 8	- **Lecture: multimedia elements on ebook** - 30 mins demo: Animating repeating shape layers, animating brush stroke with paint, archiving projects - Screening: Student Curator 8 - Storyboard: Assignment 3 - Lab Time: assignment 3 - Reading: Chapter 6, *Motion Literacy*, 162
Week 9	- **Lecture: web banners & online advertisement on social media** - 30 min demo: Optimizing preferences, Disk Cache, Memory, generating backgrounds with effects - Screening: Student Curator 9 - Final Critique: Assignment 3 - Reading: Chapter 2,*Motion Graphics in Film*, p18
Week 10	- **Lecture: Motion graphics used on TV commercials, MTV & The Weather channel** - 30 mins demo: Importing and interpreting video & sound footage, video editing with Color Finesse - Screening: Student Curator 10 - Raw video screening from students (client assignment) - Lab time: 4th assignment - Reading: Chapter 3, *Motion Graphics in Television*, p36
Week 11	- **Lecture: historical trend of using motion Graphics on the web** - 30 mins demo: Rotoscoping, Roto Brush, time Remapping, timewarp, keylight & green screen - Screening: Student Curator 11 - Work Critique: Assignment 4 - Lab time: Assignment 4 - Reading: Chapter 4,*Motion Graphics in Interactive Media*, p78
Week 12	- **Lecture: The Good and Bad of motion graphics** - 30 mins demo: Cameras & light in After Effect, material choices, extrusion, 3D & ray-traced renderer - Screening: Student Curator 12 - Final Critique: Assignment 4 - Lab time: Continue to work on Final Project.

	- Reading: Chapter 5,*Motion Graphics in Public Spaces*, p124
Week 13	- 30 mins demo: Animating Camera - Screening: Student Curator 13 - Lab time: Continue to work on Final Project.
Week 14	- Screening: Student Curator 14 - Lab time: Continue to work on Final Project.
Final Exam	- Critique of Final Project - Final Portfolio Review

TCNJ's attendance policy
http://policies.tcnj.edu/policies/digest.php?docId=9134.

TCNJ's academic integrity policy
http://policies.tcnj.edu/policies/digest.php?docId=7642.

TCNJ's Americans with Disabilities Act (ADA) policy
http://policies.tcnj.edu/policies/digest.php?docId=8082 and Disability Support Services: http://differingabilities.pages.tcnj.edu.