

**Pre College: Digital Filmmaking and Motion Graphics Mon-Fri 9-4 , three week intensive**  
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Students in this class will learn to create thoughtful video and effects, using specific theoretical and software techniques through instruction and individual practice.

This is not a technical video editing and effects course, rather the purpose of this class is to give students a full understanding of the specific theory and ideas which come into play with time based visual imagery as well as give students the specific technical training to create compelling content. In addition, students will be asked to begin thinking like artists to pursue their own aesthetic sense.

**Attendance/Homework/Grading Policy:**

**Attendance:**

Attendance is absolutely important in this course. If you have unauthorized absences you will fail the course. Authorized absences can only include such things as sickness or family emergency.

**Homework:**

Homework will be given on a per class basis and may or may not be in class or a take home assignment. It will directly reflect upon what is covered in class but will encourage that the student investigating issues more deeply than dealt with in the classroom.

**Backups:**

All project work completed over the course of the summer session must be archived. SVA servers are not a reliable place to store data and may be deleted. As a result, it is recommended that students purchase a portable firewire drive or make frequent CD/DVD burns. Please note that excuses for missing homework will not be accepted.

It is the student's responsibility to keep up to date with the class, both in terms of homework assignments given and weekly topics. I will not cover material more than once.

**Grading:**

30% class participation

50% final assignment

20% attendance

**Course Materials:**

Firewire hard-drive (optional but highly recommended)

2 DV tapes

sketchbook and pencils

storyboard materials (<http://www.schoolhousevideo.org/Pages/Storyboards.html>)

**Reference Materials (suggested):**

**Compositing and Visual Effects:**

After Effects in Production: A Companion for Creating Motion Graphics, Cris Meyer (3<sup>rd</sup> edition)

Creating Motion Graphics with After Effects, Trish and Cris Meyer (3<sup>rd</sup> edition)

Motion Graphics:Graphic Design for Broadcast and Film, Steve Curran

**Editing and Videography:**

Final Cut Pro HD: Editing Professional Video, Diana Weynand, Peachpit Press

The Digital Filmmaking Handbook-3<sup>rd</sup> Edition, Ben Long and Sonja Schenk

**Stock Libraries:**

**Audio:**

<http://findsounds.com/>

<http://www.freeplaymusic.com/>

<http://freesound.iua.upf.edu/index.php>

**Images:**

<http://www.archive.org/details/prelinger>

[www.google.com](http://www.google.com)

[www.imageafter.com](http://www.imageafter.com)

**Week One****Class #1:****Web:**

[http://mith2.umd.edu/clients/mlifton/rosebud\\_old/Glossary/index.html](http://mith2.umd.edu/clients/mlifton/rosebud_old/Glossary/index.html)

**Theory:**

An Introduction to the class

A quick discussion about the medium

An Introduction to timebased thinking

Terminology+Video standards

Art vs. Commerce

**Technique:**

After Effects-a digital fx guide

Final Cut Pro-An introduction to the editing process

Photoshop-2d digital manipulation

“Writing with images”-How does the written word differ from the image

**In Class Assignment #1:**

Part #1:

The film editor Carol Litteton described the act of editing as similar to writing: “You become a writer, but you’re writing with images...” Using this idea as a starting point, students will be asked to write a short one to two paragraph piece which depicts a meaningful occurrence. Once they’ve done this, students will draw a series of pictures which describe the story but use no words. How do these two different mediums differ and how are they similar.

**What is a treatment?****What is a storyboard?**

Part #2:

Hollywood Structure.

If you’ve watched any blockbuster film you’ve probably noticed that most films follow a typical structure which helps to move the story along. This structure is called the 3-act structure and is as follows:

**Act 1:The beginning (20-30 minutes)→Act 2: The middle (40-50 minutes)→Act 3:  
The End (20 minutes).**

Using your previous in class exercise, flesh out the visual depiction of the story you’ve written to create three distinct acts. Where is the story established? What happens if the 3 act structure goes wrong?

The Kuleshov Effect-making sense of sequenced images

**In Class Assignment #2:**

Lev Kuleshov’s experiment demonstrated that when separate images were shown in sequence, humans tend to construct a narrative around the event in an attempt to create meaning.

Students will use digital camera to capture a series of related, or unrelated digital pictures. Once these pictures have been digitized, students will construct meaningful and interesting narratives out of a variety of different source footage to create a visual narrative.

**Class #2:**

**Web:**

**Theory:**

The pipeline: Pre-Production→Production→Post-Production

An Introduction to editing-Understanding the visual language of moving pictures.

Continuity editing vs. Montage editing

**Technique:**

Final Cut Pro-Day 2

Creating Meaning

**In Class Assignment #3:**

Part #1:

Editing can be thought of as the act of creating visual meaning out of distinct but separate pieces. Using precompiled footage from Battlestar Galactica, students will create a short, edited piece using the 3 act structure, which tells a compelling story. This will be edited together in FCP and exported as a QuickTime movie.

Part #2:

Using the treatment from NYPD Blue episode #119:Grime Scene students will do the following:

1. Review the footage and treatment to see which elements fit best.
2. Construct a well edited piece, using the raw footage, which best illustrates the treatment direction.

Remember that since this footage is raw and unedited, students will need to make good decisions on which footage to use to support the treatment.

**Class #3:**

**Web:**

[http://www.kenstone.net/fcp\\_homepage/log\\_capture\\_workflow.html](http://www.kenstone.net/fcp_homepage/log_capture_workflow.html)

**Theory:**

Digital Video Standards

An Introduction to working with Digital Video Cameras

**Technique:**

What is Video

Video Standards and Aspect Ratio (NTSC, HDV, HD1080)

Frame Rate and Pixel Size

An Introduction to Codecs

An Introduction to Audio

Working with a Camera

Digitizing Footage-Log and Capture process

Setting up a shot

**In Class Assignment #4:**

Part #1

The production process starts with a script and storyboards, leads to a shot list, and ends with locations where the shoot takes place on.

Students will break into groups, create a short treatment and script which tells a succinct story and uses real world circumstances (no aliens or giant robots please), storyboard and plan the shot list and begin filming on location. The location will be provided for the students in advance.

#### Part #2

##### Log and Capture

Working with the previous exercise footage, students will log, capture, and edit their digitized footage into final form.

#### **Class #4:**

##### **Web:**

[http://communication.utexas.edu/technology/knowledgebase/finalcutpro/PROD\\_000935.html](http://communication.utexas.edu/technology/knowledgebase/finalcutpro/PROD_000935.html)

<http://docs.info.apple.com/article.html?artnum=300775>

<http://www.andersschroder.com/boards.html>

##### **Theory:**

Input/output-getting files into other software

##### **Technique:**

Exporting movies

Print to Video

Introduction to the scope and goals of the final project

#### Project Development

##### **In class assignment #5:**

In this assignment, students will begin to think conceptually about their final project and begin to define the overall requirements and needs for the shoot. Students will begin to develop the following:

- Script
- Storyboard
- Shot List
- Treatment
- Production schedule

Students will need to complete the required elements and will pitch the idea to the class on day #5.

#### **Class #5:**

**Pitching the Project-**In class presentation of initial student ideas for the scope of the summer project. We will discuss the projects and try to find places where we can simplify or remove problems in the production.

##### **Web:**

<http://www.youtube.com/watch?v=QkraDXWdib0>

<http://media34b.libsyn.com/podcasts/a84068b9c92b742d74597317f34cacec/468cf44d/idlemindspodcast/izzyvideo56big.mp4>

##### **Theory:**

An Introduction to studio lighting

The art of lighting

**Technique:**

3 Point lighting in practice

Lighting in the real world

**In class assignment #6:**

Part #1

Students will explore lighting in an exterior environment using what light is available in the immediate environment. Where do problems arise?

Part #2

The second part of the in class assignment will be to use light kits in a controlled interior environment to create interesting and engaging 3 point studio lighting. Remember that the three parts of the 3 point system are as follows:

**Key**-Defines the overall light color of the shot and gives the subject a “lit” look

**Fill**-Lightens dark areas and decreases contrast

**Back**-Separates the foreground character or objects from the background

**Week Two**

**Class #6:**

**Shot Day-**

Reviewing the scope of the final projects including shotlist and concept ideas, students will plan, shoot and capture footage for all aspects of their project.

**Class #7:**

**Web:**

[creativecow.com](http://creativecow.com)

[highend3d.com](http://highend3d.com)

[motionographer.com](http://motionographer.com)

[nycmg.org](http://nycmg.org)

<http://www.aiga.org/>

[http://www.aiga.org/resources/content/1/7/3/images/designis\\_en.mpg](http://www.aiga.org/resources/content/1/7/3/images/designis_en.mpg)

**Theory:**

Effects, Motion Graphics, and Design

What are digital Effects?

After Effects+Shake+Commmotion+Combustion+Motion+Photoshop+others

**Technique:**

Understanding digital workflow

Files coming in—Files coming out

Creating Compositions/ Importing Footage Files

Modifying size, time, and other options within a composition.

Interpreting footage (alpha channels)

Understanding Alpha channels (how to use them and how to make them)

Introduction to keyframing and effects

Layer properties

Keyframes + keyframe types

Motion paths

Interpolation

Value graphs+speed

A crash course to rendering in 2d

In Class Assignment #7:

**Design as persuasion-** students will conceptualize a short piece to create an engaging visual narrative with a specific persuasive theme and visual style. Use any specific artist tool you'd like to use including pencil, paper, photography, scanned imagery, or other items. Remember the point of this exercise is to use visual imagery to engage and persuade the viewer into a specific viewpoint.

**Class #8:**

**Web:**

brandnewschool.com

eyeballnyc.com

<http://fueldesign.com/>

<http://www.massmarket.tv/>

mk12.com

niceshoes.com

psyop.tv

**Theory:**

Understanding Animation

An Introduction to time based thinking

Animation-organic character animation

Character Design for animation

Character Animation Workflow

**Technique:**

Animation I

- Layer properties

- Keyframes + keyframe types

- Motion paths

- Interpolation

- Value graphs+speed

Setting up a character for animation purposes

- 2d Rigging and Character Design

- The point of good parenting

- Walk Cycle Animation

**Class #9:**

**Web:**

<http://en.wikipedia.org/wiki/Hyperreality>

<http://video.google.com/videoplay?docid=8369356292081076830&q=ufo>

**Theory:**

What is Reality?

Now that you can make anything look real, can you ever believe what you see?

An Introduction to Compositing

What makes an image look real?

**Technique:**

Rendering in 2d

- Render Order

- Values+Compression types and codecs
- Motion Blurring/shutter angles
- Using Transfer modes and render passes to make a composite

#### Compositing 101

- Understanding perspective
- Understanding light (why shadows are important)
- An Intro to Color Correction
- Aliasing is your enemy

#### Understanding multipass rendering and transparency

- Working with Photoshop
- Tools for seamless image creation (clone, masks, etc...)
- Using Photoshop as a design tool (importing compositions)

#### In class assignment #8:

Using either digital camera photos or other materials students will attempt to create a digital composite of something that could not exist in the real world. Try to incorporate these composites into digital video or moving layers.

#### **Class #10:**

##### **Web:**

##### **Theory:**

Methods to control transparency-  
A vector vs. raster approach

##### **Techniques:**

##### Masks and Transparency I

- Techniques for Importing masks
- Drawing masks using freeform tools
- Animating Freeform masks over time

##### Masks and Transparency II

- Vector Editing
- Rotoscoping
- Masking complex characters

#### In class assignment #9:

The goal of this assignment will be to create the illusion of someone interacting with themselves as if you're interacting with another person. The goal of this week's assignment is to create a convincing movie which shows two of the same person interacting in a seamless manner. Students will use a camera on a tripod to shoot themselves in an environment two times and a blank background plate. Once this has been done, students will use digital techniques to composite the two versions of themselves into a single movie.

#### **Week 3**

##### **Class #11:**

##### **Web:**

##### **Theory:**

An Introduction to working with bluescreens  
Lighting for bluescreens  
Image based transparency  
Using color or parts of an image to control what you see

**Technique:**

Rastor editing

An Introduction to Keying-controlling transparency through specific colors

Why is it always blue or green?

From Simple to Complex

Lighting for a Key

In class assignment #10:

Part #1:

Working with a pre-supplied light kit in the SVA blue screen room, students will explore the specific techniques used to capture high quality footage for keying and composite. We will capture a large amount of footage which students will digitize and process in 2d software. Think about shooting content which is appropriate for the scope of the final project.

Part #2:

Using the digitized bluescreen footage, students will process and create interesting composites of overlaid characters interacting with each other.

**Class #12:**

**Web:**

**Theory:**

A General Introduction to Motion Tracking and Stabilization

What is stabilization?

What is motion tracking?

**Technique:**

Motion stabilization 101

2D vs. 3D Motion tracking-different methods for different needs.

Motion Tracking-workflow (use a tripod)

Advanced Motion Tracking

Perspective corner pin

Integrating 3d into moving 2d footage

In class assignment #11:

If you take a look at websites like youtube or others, you'll see a proliferation of authentic ufo sightings, aliens, crop circles, or other things which could or could not be real. We've now entered an age where it's possible to make anything we want using digital technologies. This week's homework assignment will be an effort in producing inauthentic, or fake, footage. The Scenario: There has been a UFO sighting in New York City involving a part of Manhattan. Although authorities are not sure, you have captured exclusive footage of some sort of alien craft over the skylines on NYC. The Approach:

1. Capture handheld footage of necessary components
2. Stabilize and correct footage
3. Using google or other image database websites, find images or stockfootage of "alien" ufo object.
4. Using any 2d or 3d program create graphics and information displays to overlay over compositions.
5. Extra credit will be given for: good animation, texture, lighting work with props, 2d video treatment that realistically simulates hand held or old video, 2d or 3d effects that simulate the effects of a UFO in Manhattan. Keying/roto work which adds to drama (think little green men in big blue screen).
6. Extra Extra credit will be given if you can successfully plant video clip on youtube and get away with it.



**Class #13:****Web:**

<http://wip.warnerbros.com/ascannerdarkly/>

<http://www.wakinglifemovie.com/>

**Theory:**

Introduction to Painting

Animation is what moves and what doesn't

Painting in Photoshop vs. painting in After Effects

**Technique:**

AE 6.0 Paint Layers

Vector Paint for animation

Filmstrip and the Wacom

**Class #14:**

In class project-working on final piece

Final edited piece due at end of Class #14

**Class #15:**

Reedit and cleanup.

**Final Project-**

The final project for the three week intensive will be to create a short video piece which emphasizes the production process and is made in a thoughtful and professional manner. Students will be asked to conceptualize an idea, present and defend the idea in class, and produce the necessary elements to be editing into a final form.

The format and final approach that students use is open and the piece can be anything of interest to the student. Past projects have included video art, documentary, short film, or music video. Be creative and professional.

Group work is encouraged.