EMF 487
Digital Post Production (Visual Effects II)

Prerequisite: EMF 380

Course Description
Exploration, and critical analysis of visual effects and digital media kinetics with exercises in virtual lighting and camera movement, compositing, animated titles, and synthesis of graphics and video.

Objectives
Upon successful completion of the course students will be able to:
• Invent dynamic motion graphics using a variety of source materials and conceptual references
• Produce unique video special effects
• Create layered compositions employing virtual depth and three dimensional movement
• Compose and design artificial subjects and sets
• Design and produce kinetic title sequences
• Compile final output for DVD and the web
• Gain an understanding and respect for the history & theory of motion graphic design

Required Texts

Required Hardware / Blank Media
• External Firewire (IEEE 1394) Hard Drive – at least 100 GB storage space and 7200 RPM spindle speed. NO USB DRIVES PLEASE. Must be Mac formatted drive. Check website for recommended drives: http://www.towson.edu/emf/medialabs.asp
• USB flash stick (at least 8 GB) – recommended site: newegg.com
• Headphones
• 5 DVD-R blank discs with cases
• Sketchbook/Notebook (for homework assignments)

Attendance/Absence Policy
Attendance is mandatory and will be taken at the beginning of each class.

Attendance will be worth 10% of your final grade. Frequent absences, tardiness, and/or leaving class early will be detrimental to your final grade. Each class is worth 6.6 points toward a total 100 points possible for attendance. Lateness or early departure from class will count as 3.3 points taken away from your total attendance (I do pay attention). More than 4 unexcused absences will result in a failing grade. Unexcused Absences for more than one critique date will result in automatic failure in the course. A written note from qualified individuals is required for absences resulting from illness, family emergency, religious
observance, participation in university activities at the request of university authorities (Intercollegiate Athletics, Forensics Team, etc.), or compelling verifiable circumstances beyond the control of the student. The instructor may allow absences in certain situations, but only if the student has talked to the instructor beforehand. **If you miss a class, it is your responsibility to find out what announcements, assignments, readings, or lecture notes you missed.**

**Assignments/Projects**
Students are expected to complete assigned projects, homework, and readings before class on the due dates listed in the syllabus or as announced in class. All projects and homework must be handed over at the beginning of class.

**Late Work**
The grade for any assignment/project turned in late will be lowered by 1/2 letter grade for each day after the due date. Late work will not be accepted without prior discussion with the instructor. Considerably late (more than one week) cannot be made up for more than a D+ grade.

**Time/Effort Commitment**
This is a vigorous and hands-on course made up of lectures, discussions, inclass exercises, and equipment demonstrations, so you will need to be sure you make it to every class. Motion graphic creation is a time intensive process, so be prepared to manage your time wisely outside of class to complete your projects, readings, and homework.

**Incomplete**
A grade of Incomplete is only given if you are unable to complete the work required in the course because of verifiable medical reasons or documented circumstances beyond your control as stated in the current Undergraduate Catalog. The current Undergraduate Catalog can be downloaded as a pdf here: http://wwwnew.towson.edu/main/academics/ugrad/undergraduatecatalog.asp

**Critiques**
Critique dates will often last the entire duration of the class. During the critique it is expected that class members be present and involved in the discussion and transmission of feedback on other people’s work. Critique dates are reserved strictly for review of finished projects and subsequent discussion; therefore last minute scrambling to complete projects will not be permitted. Even if your project is incomplete at the time of deadline you are still required to attend class and give your full attention to the work of others being presented. You will learn more from other people’s mistakes, successes, interpretations, solutions, disagreements and discussions than you will trying to make up for lost time on your own project.

- The majority of what you will learn in this course about design, motion graphics aesthetics, and your own personal opinions and tastes will take place during critique.
- Missing more than one critique date will result in an automatic failure of the course.
- Arrive to class, on critique days, with your work in the proper assigned format, cued if necessary, and prepared to discuss and express your
ideas.
• The final critique date is absolutely mandatory and equivalent to a final exam.

PROJECT DESCRIPTIONS
Projects will be graded according to the following criteria:
• composition, visual aesthetics, technical proficiency, and artistic merit 50%
• completeness of project and clear communication of a unified concept 50%

1. Self Portrait (Chroma Key) – (final cut pro, photoshop, after effects)
Using media generated in class and images and video created and collected from the first homework assignment, compose a brief (30 seconds) self portrait video. Use any stills, moving images, titles, effects, music or sound that you wish. Final product must include: sound, animated stills, applied effects, chroma key video, transitions, and titles.
100 points/10% of final grade.

**Students enrolled in the graduate level section (EMF 587) must also give a 45 minute presentation/talk on the history/aesthetics of chroma key compositing in film/video/television.

2. Title Sequence (as 3D motion graphic choreography) – (after effects, photoshop, illustrator) Create a title sequence for an invented television show or movie. Final version should be 30 seconds to 2 minutes long, utilize animated and/or processed text with layers of moving images. The final piece may be abstract or representational in its presentation. The project should emphasize 3D space, composition, design, and type in motion. 100 points/10% of final grade.

**Students enrolled in the graduate level section (EMF 587) must also write a 3-5 page research paper on the aesthetics/history/theory of title sequence design.

3. Film Festival Show Opener – (after effects, final cut, photoshop, etc…)
Create a concept for an opening sequence to a film festival (either the EMF Media Arts Festival or another festival of your choice). The opener should be 30 seconds-1 minute in length and is open ended in terms of content, but it must utilize digital tools and involve 3D compositing, lighting, and camera movement in After Effects. 200 points/20% of final grade.

**Students enrolled in the graduate level section (EMF 587) must also give a 45 minute presentation/talk on the history/aesthetics/evolution of trailers/show openers.

4. DVD and Demo Reel – (DVD studio Pro and any other software as needed) Compile all of your video work from the class onto DVD. The interface of the DVD must be original (NO templates), with menus, transitions, and navigation all from scratch. Along with each project compiled on the DVD you must also edit together a short 30-second reel showcasing the highlights of your motion graphic work from the semester.

The 30-second highlight reel should be included on the compilation DVD and also compressed and uploaded to either google video, youtube, vimeo, or another similar site. 200 points/20% of final grade.

**Students enrolled in the graduate level section (EMF 587) must also
design a DVD cover and disc label. The graduate students are expected to also include work from outside of the class in the Demo Reel and must utilize animated transitions/effects for DVD menus and button transitions.

**Quizzes**
Throughout the semester there will be 3 practical quizzes (number of quizzes subject to change). The quizzes will always begin promptly at the start of the class. They will consist of numerous hands on technical exercises that I will demonstrate on the projector and then ask you to replicate. The quizzes exist to make sure that you are doing the weekly readings and can solve technical tasks within Adobe After Effects. The average of your three quiz grades will equal 100 points (10% of the final grade). All quizzes will be open book.

**Homework**
Throughout the semester there will be homework assigned on a weekly basis according to the class schedule (homework assignments are subject to change). Homework will be graded as either complete or incomplete. Each homework assignment will be worth 6.6 points totaling to 100 points (10% of final grade).

**GRADING POLICY**
**Grading Breakdown**
Final grades will be calculated according to the percentage of your accumulated points based on the total possible points for the semester.
- Project 1 (Self Portrait) 100pts / 10%
- Project 2 (Title Sequence) 100pts / 10%
- Project 3 (Film Fest Opener) 200pts / 20%
- Project 4 (Demo Reel/DVD) 200pts / 20%
- Quizzes (average) 100pts / 10%
- Homework 100pts / 10%
- Attendance 100pts / 10% (6.6 pts per class meeting)
- Participation 100pts / 10%

**Grading Scale**
- 94% - 100% (940 – 1000 points) = A
- 90% - 93% (900 – 939 points) = A-
- 87% - 89% (870 – 899 points) = B+
- 83% - 86% (830 – 869 points) = B
- 80% - 82% (800 – 829 points) = B-
- 76% - 79% (760 – 799 points) = C+
- 70% - 75% (700 – 759 points) = C
- 66% - 69% (660 – 699 points) = D+
- 60% - 65% (600 – 659 points) = D
- 0% - 59% (0 – 599 points) = F

The grade of A is awarded for excellence, the very best work in the class. An A student turns in all work on time with consistently very high standards of quality, creativity, and original thinking. This person produces outstanding products and
performs exceptionally in presentations and critiques. This grade is for Excellent work in the class.

The grade of B is awarded to students who have turned in all work on time, and consistently completed work in a high quality manner. The work shows creative thinking, extra effort, and care in presentation. This person has demonstrated knowledge that surpasses the basic material and skills of the course. This grade is for Very Good work in the class.

The grade of C is earned when all class work is turned in and the student has mastered the basic material and skills of the course. This person participated in class and demonstrated knowledge of the basic material and skills. This grade is for average work in the class.

The grade of D or F is given for work that is incomplete, late, and/or does not demonstrate mastery of the basic material and skills of the course. This grade is for below average work in the class.

Tentative Class Schedule
CMG = Creating Motion Graphics with After Effects Book

Week 1 • 2/2 • Intro
Course introduction, review syllabus, class policies, texts, etc. Green screen shooting demo. Go over video and still image resolution and pixel aspect ratio issues. Digitizing using Final Cut Pro. Screening of motion graphic design & digital post examples. Assign homework and first project.

Homework: Storyboard concept (at least 6 frames) for project #1. Shoot and Digitize additional chroma or luma key footage. Bring digitized video and high resolution (720 x 480 or larger) still images to work on project #1 during next class.

Read: CMG Chapters 27, 27b: pdf file on the DVD (Keying), and 34 (Roto Brush)

Week 2 • 2/9 • Key Lab
Present storyboards and concepts for Project 1 to class. Using homework still images and digitized green screen footage begin to compose and animate the elements of the first project using final cut pro, after effects, and photoshop. Demo of basic after effects workflow, interface, and how to apply chroma and luma key compositing.

Homework: complete rough cut of Project #1 for presentation and critique at the beginning of next class.

Read: CMG Chapters 38, 41, 42 (Import & Interpret, Video Issues, and Render Queue)

Week 3 • 2/16 • Project #1 Rough Cut
Project #1 (Self Portrait) rough cuts reviewed at beginning of class. Class work day. Demo: Rotoscoping in After Effects and Photoshop.

Homework: Complete Project #1 (Self Portrait) for next class.

Read: CMG Chapter 13 (3D Space)

☆ Week 4 • 2/23 • Project #1 Critique (Self Portrait)
Project #1 (Self Portrait) Critique.

Homework: Write a short treatment for your concept for the Title Sequence and create a storyboard (at least 10 frames) with sound notes. Gather and record
sound to begin compiling soundtrack next class for Project #2. Begin collecting stills and video for Project #2. Be sure to bring headphones to next class.

**Read:** CMG chapters 14-15 and 36 (3D Cameras, 3D Lighting, Audio)

**Week 5 • 3/2 • QUIZ #1 3D Space & Cameras**

Quiz #1 - 3D Space and Cameras, CMG Chapters 13 and 14.
Pitch your concept for Project #2 (title sequence) and show storyboards. Demo: cutting, looping, mixing sound, and marking beats. Synching picture to sound and review of basic keyframing animation and using 3D cameras and lights. In class work time and one-on-one help.

**Homework:** Bring in one example (either on DVD or a weblink) of what you would consider a “good” or “unique” title sequence.

**Read:** CMG chapters 11, 12, 16 (Track Mattes, Stencils, and Parallel Worlds)

**Week 6 • 3/9 • Quiz #2 3D Lighting and 3D Text**

Quiz #2 - 3D Lighting and Text, CMG Chapters 15 and 16

View and discuss homework examples. In class work day. Demo: time remapping, motion blur, animating 3D layers, parenting, nesting comps, and precomposing. Demo: type path animation, write on with paint tool and stroke effect.

**Homework:** Complete Rough Cut of Project #2 (Title Sequence) for next class.

**Reading:** CMG chapters 22, 23B (Bonus Chapter on DVD), and 24 (Effects)

**Week 7 • 3/16 • Project #2 Rough Cut**

View and discuss rough cuts of Project #2 (title sequence).
Assign Project #3 (Film Fest Opener), view examples.

**Homework:** Complete Project #2 for critique after Spring Break.

Come up with a concept for Project #3. Bring a brief outline of idea (complete with design and typography notes) to class along with any images, video, or other media to work on.

**Reading:** CMG chapters 29-30 (Motion Stabilization & Motion Tracking)

**Week 8 • 3/23 • NO CLASS – SPRING BREAK**

**✰ Week 9 • 3/30 • Project #2 Critique (Title Sequence)**

Critique of Project #2 (Title Sequence)
Pitch concept for Project #3. View and discuss examples of sequence design.
DEMO: Motion Tracking

**Homework:** Find an example (either on DVD or weblink) to an interesting festival opener sequence to view and discuss next class.

**Reading:** CMG chapter 32 and 35 (Shape Layers & Puppet Tool)

**Week 10 • 4/6 • Quiz #3 Shape Layers and Puppet Tool**

Quiz #3 – Shape Layers and Puppet Tool, CMG chapters 32 and 35.

View and discuss examples of Festival Show Opener (homework).
Assign project #4 (DVD & Demo Reel).

**Homework:** Complete Rough Cut of Project #3 for next class

**Reading:** CMG catch up

**Week 11 • 4/13 • Project #3 (Festival Opener) Rough Cut**

View rough cuts of project #3, discuss and give feedback. Work day for reediting and tweaking rough cut.

**Homework:** Complete Project #3 (Festival Opener) for next class

**Reading:** DVD Studio Pro Help PDF pg. 1-115

**✰ Week 12 • 4/20 • Project #3 (Festival Opener) Critique**

Project #3 (Festival Opener) critique. View and Discuss.
View examples for next project. Brainstorm session for ideas for Demo Reel project. Class time to begin making a digital (photoshop or illustrator) storyboard. Demo: encoding video for DVD and the web using compressor.

**Homework:** Develop a concept for Demo Reel and begin production on Project #4.  

**Reading:** DVD Studio Pro Help PDF pg. 115-260

**Week 13 • 4/27 • DVD & Demo Reel Pitch and Storyboard Work Day**  
Pitch project #4 concept to class, discuss and gain feedback. Class work-day on polishing up storyboards and creating a detailed production plan.  
Class work day on Demo Reel & DVD.  

**Homework:** Complete a Rough Cut of Project #4. Begin encoding projects for DVD Reel. Collect and create images, video, and sound for backgrounds, buttons, and various elements for DVD Reel.  

**Week 14 • 5/4 • Project #4 Rough Cut**  
View and discuss Project #4 Demo Reel rough cuts. Basics of DVD menu creation, navigation, simulation mode, and burning a disc in DVD Studio Pro. Integrating Photoshop, Illustrator, and After Effects files into DVD Studio Pro projects. Designing menus, buttons, and overlays in Photoshop.  
Bring in images and media files to begin compiling DVD menus and navigation.  

**Homework:** Complete Demo Reel for next class.  

**☆ Week 15 • 5/11 • Project #4 Critique (Demo Reel)**  
**Final Class Meeting.** View and Critique Project #4 Demo Reel. The rest of class reserved for re-editing earlier projects, compiling and editing DVD menus and assets. Demo: compressing and uploading video to the web.  

**Homework:** Complete Project #4 (DVD portion)  

**☆ Week 16 • 5/18 • Project #4 Due (DVD)**  
No Class meeting. Turn in Project #4 (DVD portion) on a labeled disc with a hard case into Phil’s dropbox on office door (MC 107) by 4pm. Email the link to your uploaded Demo Reel on the web. Have a great Summer Break!

**Additional Resources and Websites**  
VAML phone: 410-704-2592  
Student Computing Services (Cook Library, Rm. 35): www.towson.edu/scs  
Media Resource Services (Cook Library, Rm. 202):  
http://cooklibrary.towson.edu/mediaResources.cfm  
Adobe Tutorials: http://www.adobe.com/support/  
Creative Cow Tutorials: http://library.creativecow.net/  
Photoshop for Video website: http://photoshopforvideo.com/  
Artbeats Tutorials: http://www.artbeats.com/video_tutorials  
And  
http://www.artbeats.com/written_tutorials  
Movie Magic (Special Effects History): http://www.slashfilm.com/votd-moviemagic-tv-specials/  
Motionographer Blog: http://motionographer.com/  
Art of the Title Sequence Blog: http://www.artofthetitle.com/