Palomar College – Graphic Communications

GCMW 206 Motion Graphics Production and Compositing

Six hours lecture/laboratory (3 units)

Instructor: Mark Bealo Email: mbealo@palomar.edu
Office: SC-1 Telephone: 760-744-1150 x 2958

Office Hours: MW 3 - 5:30PM. Others by appointment.

Catalog Description

This course will be a "cap course" in which the student combines skills learned in multiple disciplines. For example the student will combine video skills learned in Graphic Communications and RTV with skills learned in ART or CAD by compositing a video that incorporates 3D rendered characters with live video footage. The student will complete the work by preparing it for publication using VHS, DVD, and on-line Streaming technologies.

Prerequisite

GCMW 204 Motion Graphics for Multimedia and GCMW 205 Digital Video for Multimedia.

Recommended Prerequisite

GCIP 140 Digital Imaging with Photoshop or GCWM 165 Digital Video Design.

Requirement for the Following Certificates

Digital Animation, Compositing and Music • New Media Compositing, Authoring and Distribution

Open Lab Access

Open lab hours are subject to change - check lab schedules for updates.

Course Objectives

Successful students will be able to do the following by the end of the course:

- 1. The student will demonstrate the ability to perform:
 - Video post-production
 - Compositing
 - Special effects production
- 2. The successful student will create scene composites using:
 - Video
 - Green Screen
 - 3D (w/ Alpha channel and mulitple passes)
 - Stills (2D)
 - Rotoscoping
- 3 The student will demonstrate the ability to incorporate editing from other video programs.
- 4 The successful student will demonstrate the ability to perform DVD/Video production.

Specific Content Will Include

- I. Compositing workflow.
- II. Basic Compositing
- III. 3D Essential Skills
- IV. Understanding the 3D Interface and Workflow
- V. Color Correction
- VI. Intermediate Compositing
- VII. Vector Painting
- VIIII. Compositing Video and Audio
- IX. Creating Clean Plates
- X. 3D Basics
- XI. Polygonal Modeling
- XII. NURBS Modeling
- XIII. Subdivision Surfaces
- XIV. Rotoshapes
- XV. 3D Animation
- XVI. Rendering
- XVII. Film Compositing
- XVIII. Keying
- XIX. Advanced Compositing
- XX. Tracking
- XXI. 2D Animation
- XXII. 3D Compositing
- XXIII. Morphing and Warping
- XXIV. Media Output and Delivery

Software to be used includes the following:

Compositing - Apple's Shake

Editing – Apple Final Cut Pro

Animation – Alias/Wavefront's Maya

Sound – Apple Soundtrack, GarageBand

DVD production - Apple DVD Studio Pro, iDVD

Streaming Video - Apple QuickTime Pro, Compressor

Required Reading

Apple Pro Training Series: Shake 4, By Marco Paolini.

Peachpit Press; ISBN: 0321256093.

Suggested Reading

Current articles in Post, Computer Animation, and DV magazines.

Required Writing

Students will demonstrate problem solving skills by use of short essays and written reports and multi-choice testing.

Outside Assignments

Students are expected to spend a **minimum of three hours per unit per week** in class and on outside assignments. Students are to read text, study lecture/lab notes, research and write required paper(s), and complete lab assignments. Keep notebook of all project storyboards, usability reports, and proofs.

Required Supplies

CD/CD-RW, DVD-R/RW disks, and firewire or thumb drives help out when it comes time to save. A big smile and a healthy dose of enthusiasm goes a long way as well.

Policies

- 1. Any student with a verified disability may be entitled to appropriate academic accommodations. Please contact Disabled Student Services for more information.
- 2. The GC Lab is available for your convenience in practicing and completing course assignments. Lab hours are posted.
- 3. Your classroom participation counts as part of your final grade. Because this course requires extensive hands-on application, attendance is imperative. If you choose to drop this class, it is your responsibility to do so, not the responsibility of the instructor. To drop the course use eServices otherwise, an F or FW will be recorded on your permanent record.
- 4. Students should be aware of Palomar's Student Rights and Responsibilities in the 2007-2008 Catalog. Please pay particular attention to the sections on Academic Integrity, Drugs and Alcohol Policy, Smoking Policy, Crime Awareness, Sexual Harassment Policy, Student Behavior Rules and Regulations, and the Student Conduct Code.
- 5. Meeting deadlines is critical. All projects must be properly completed and submitted by the assigned due date. If a project is turned in late, it is dropped a minimum of one full letter grade per week.

Evaluation

Evaluation for this course will consist of a series of projects, assignments, papers and class participation. These include but are not limited to the following:

- 1. Rotoscoping: Perform rotoscoping on a suitable image in order to create the effect that areas that once existed in the image are no longer present.
- 2. Rotoshape: Make rotoshapes to extract or isolate a portion of an image by masking or using them as alpha channels in the composite.
- 3. Keying Project: Generate a matte that will extract an object from one image and enable it to be composited with others.
- 4. Tracking: Utilizes the various tracking nodes included in Shake, create a match move for and stabalize an image by tracking its motion.
- 5. Warping and Morphing: Perform a warp and morph using the various techniques described in the tutorial and in class discussions on a series of images/video.
- 6. Final 2D and 3D Composite: Create a 3D animation that will be Multipass rendered. Combine those renders with other 2D animation and video inside of Shake to create a final composite.

Projects will account for 50% of your final grade, Lessons 15%, classroom participation 15%, and the final project 20%. Each project will reflect specific compositing and/ or animation techniques and may have special output properties. Details will be given defining the parameters of each project. The grading scale for the course is as follows:

90-100% = A 80-90% = B 70-80% = C 60-70% = D < 60% = F

Important Dates

All outstanding fees due for Spring 2008 must be paid to avoid being dropped from classes. If you need \$\$ for college, apply for a BOGW fee waiver. Questions? Call x. 8116. If students are not sure about their fee balances, they can view fee balances through Student eServices at www.palomar.edu.

Last day to qualify for a refund for Fall Semester classes
Last day to add or register for Fall Semester classes
Last day to drop with no notation on record
Last day to apply for Spring 2008 graduation
Last day to drop with a "W" on record
Final Project Due

Monday, February 4
Wednesday, February 20
Thursday, February 28
Saturday, March 15
See Final Exam Schedule in Class Schedule

Excerpts from Palomar College's Mission Statement

from the 2000-2001 Catalog, p. 12

...We exist as an institution to enable our students to realize and achieve their goals both as individuals and as members of their communities and to become responsible citizens of an increasingly interdependent world. We seek to achieve this purpose through five interrelated themes that define our commitment to excellence in education.

Empowerment: We seek to empower students to formulate and realize educational goals that will promote their personal growth and facilitate their full participation in a rapidly changing world.

Learning: We invite and assist students to master a core of knowledge and skills that they need in order to pursue more advanced learning at other educational institutions or in the world of work or for personal growth and responsible citizenship.

Evaluation: We evaluate the relevant skills and knowledge of all of our students so as to guide them toward meaningful and productive educational experiences... as effectively as their preparation allows...

Discovery: We constantly seek to discover better ways to empower our students to learn and to grow. We are a learning institution in both our object and our method; we will assist our students to discover what they need and want to know...

Growth: We intend to grow each year in our ability to accomplish our mission...

Excerpts from Palomar's Educational Philosophy

from the 2000-2001 Catalog, p. 13

The educational philosophy of Palomar College is based upon belief in the value of the individual and belief in the individual's potential for intellectual, ethical, personal, and social growth. Only through growth in these areas can a citizen come to understand personal rights...

Excerpt From Teaching to Learning – A New Paradigm for Undergraduate Education

By Robert B. Barr and John Tagg

In the Learning Paradigm... a college's purpose is not to transfer knowledge but to create environments and experiences that bring students to discover and construct knowledge for themselves, to make students members of communities of learners that make discoveries and solve problems. The college aims, in fact, to create a series of ever more powerful learning environments...

Selected Excerpts from Student Code of Conduct

- II. Standards of conduct. Here is a list of examples of conduct inappropriate and unacceptable for which students should expect to be held accountable.
 - A. Students are expected to avoid any type of dishonesty, including, but not limited to cheating, plagiarism, forgery, fabrication or counterfeiting documents, furnishing false information to the College, alteration or misuse of college documents or records, duplication of assignments, or aiding another in an act of dishonesty. As noted in the Statement of Academic Integrity, honesty is of utmost importance in all endeavors related to the College. A detailed discussion of academic dishonesty and related consequences are addressed in Section II.
 - I. Continued disruptive behavior, profanity or vulgarity, or defiance of the authority of, or abuse of College personnel.
 - L. Misuse of District computers, telephone, or telecommunications devices.

Also refer to : http://www.palomar.edu/studentactivities/statement on academic integrity.htm

Final Note

The instructor reserves the right to make any needed and appropriate adjustments to this syllabus.

GC 213 - Motion Graphics Production and Compositing TTh 6:00 - 8:50 PM

Instructor: Office: Texts:	Mark Bealo 760 744-1150 x 2958 Apple Pro Training Series - Shake 4; Shake	Semester: Spring 2007 Credit: 3.0 Units & Maya Tutorials. Room: GJ-2
Week 1	Lessons Intro to Shake, Showcase, "Making Of" DVDs	Assignment(s) Print Tutorial, Order Book
2	Shake Workflow-L1, Basic Tutorial-T1, Maya Essential Skills, Compositing I-L2	
3	Understanding Maya, Color Correction-L3, Compositing II-L4,5	
4	Intermediate Compositing-T2, Quickpaint-L6, Audio/Video-L9, Clean Plates-T9, Maya Basics Rotoscoping (100)	
5	Polygonal Modeling, NURBS Modeling, Lab W	ork Cont. Rotoscoping
6	Subdivision Modeling, Green Screen, RotoShape-L7 RotoShape (100)	
7	3D Animation, Lab Work	Cont. RotoShape
8	Rendering, Film Compositing-L8,	Cont. RotoShape
9	Keying-L10, Keylight-T5, Primatte-T6	Keying (100)
10	Spring Break!!!	
11	Advanced Compositing-L11, Tracking-T7, L13	Tracking (100)
12	Lab Work	Cont. Tracking
13	Morphing and Warping	Morph and Warp (100)
14	Animation-L12, 3D Renders-App. A, MiscT10	
15	Character Rigging and CG Jobs (optional)	Final 2D+3D Composite (200)
16	Making Shake Macros-T8 (optional)	
17	iDVD/DVD Studio Pro, FCP, Cleaner	DVD, VHS, and Web Delivery
Final	Final Exam 5/19 6:00 - 8:50 PM	Final Composite Due!
90%+ = A 80-89 = B 70-79 = C 60-69 = D 59 and unc		POINTS Projects 5 @ 100 ea. 500 Lessons 15 @ 10 ea. 150 Participation 150 Final Project 200 Total 1000