

The Art Institute of California – San Francisco

Course Syllabus

Course Number: CA650

Course Title: Thesis Defense

Class Meetings: Wednesdays from 6-10pm, room 512

Session/Year: Winter 2009

Instructor Name: Andrew Klein

Email Address: amklein@aia.edu

Website: <http://www.andrewklein.net/ai.html>

Instructor Availability Outside of Class: Usually 1 hour before class, but see calendar on class website for more specific times.

Thesis Defense

Course Description:

Final video/film editing along with various stages of post production issues of the thesis project are considered along with final defense strategies and preparation. The thesis project should be complete and ready for faculty review and defense by the end of this course. A unanimous vote by committee members is necessary for completion.

Course Length:	11 Weeks
Contact Hours:	165 Hours
Lecture:	33 Hours
Lab:	132 Hours per week
Credit Values:	9 Credits

Course Goals : This course is the last of the three that guide students through the process of developing a state of art animation work as graduation thesis project. As a final touch to thesis project, this course focuses on various post-production issues including video/film editing, final product presentation and thesis defense strategies. Thesis project should be completed and ready for faculty review at this point. Students will learn the optimal way to deliver the final product and defend the project against criticism by the end of this course.

The class will provide guidelines for cutting edge editing and composition techniques.

A unanimous approval by graduate committee members is necessary for the completion of this course.

The class will guide students through **the final** phase of animation – post production editing and composition. The course pursues to define student's graduate thesis project

that reflects the student's mastering of advanced animation techniques with Maya live, After Effects/Combustion/Shake, AdoePremiere5 and other software. Students must have successfully completed 'Master's Class Research Seminar' and 'Master's Thesis I' before taking this course.

Course Competencies:

Upon successful completion of this course, the student should be able to:

- Develop a concept for an original animation thesis project.
- Produce an original animation thesis project with complete post production.
- Describe the project in a written form.

Course Prerequisite(s): CA630 Experimental Inquiry; CA620 Master's Thesis II

Suggested Texts:

Advanced Maya Texturing and Lighting, by Lee Lanier, SYBEX, Wiley Publishing;
ISBN-13: 978-0-471-79404-2, ISBN-10: 0-471-79404X
Mental Ray for Maya, 3dsMax and XSI, by Boaz Livny, SYBEX, Wiley Publishing;
ISBN: 978-0-470-00854-6

Materials and Supplies: a stack of 25-50 DVD-R

Estimated Homework Hours: 4 Hours working, 40 Hours rendering

Technology Needed:

Hardware: PC or Mac as applicable

Software: Final Cut Pro, Maya, After Effects, Mental Ray, Photoshop, Additional tools as needed.

Grading Scale:

All assignments must have clear criteria and objectives to meet. All students shall be treated equitably. It will be that student's right to know his/her grade at any reasonable point that information is requested by that student. The criteria for determining a student's grade shall be as follows (on a percentage of total points basis):

A	100-93
A-	92-90
B+	89-87
B	86-83
B-	82-80
C+	79-77
C	76-73
C-	72-70
D+	69-67
D	66-65
F	64 or below

Process for Evaluation:

Attendance and Participation	10%
Mid-Term Review	40%
Final Review	50%

Student Evaluation/Grading Policies:

- Class time will be spent in a productive manner.
- Grading will be done on a point system.
- Points for individual activities will be announced.
- All work must be received by the set deadlines.
- ABSOLUTELY NO WORK WILL BE ACCEPTED AFTER THE FINAL CLASS MEETS WEEK 11.

Classroom Policy:

- No food allowed in class or lab at any time. Drinks in sealable bottles allowed in classroom.
- Edible items brought to class or lab must be thrown out.
- If student elects to eat/drink outside class or lab door, missed time is recorded as absent.
- Attendance is taken hourly. Tardiness or absence is recorded in 15-minute increments.
- Break times are scheduled by the instructor at appropriate intervals.
- No private software is to be brought to lab or loaded onto school computers.
- No software games are allowed in lab (unless in course curriculum).
- Headphones are required if listening to music during lab. No headphones are allowed in lecture.
- Any student who has special needs that may affect his or her performance in this class is asked to identify his/her needs to the instructor in private by the end of the first day of class. Any resulting class performance problems that may arise for those who do not identify their needs will not receive any special grading considerations.

Disability Policy Statement:

It is our policy not to discriminate against qualified students with documented disabilities in its educational programs, activities, or services. If you have a disability-related need for adjustments or other accommodations in this class, contact the Disabilities Services Coordinator at 415-276-1060.

Academic Honesty Policy:

Students are expected to maintain the highest standards of academic honesty while pursuing their studies at AiCA-SF. Academic dishonesty includes but is not limited to:

plagiarism and cheating; misuse of academic resources or facilities; and misuse of computer software, data, equipment or networks.

Student work that appears to violate AiCA-SF's standards of academic honesty will be reviewed by the Committee on Academic Honesty. If the work is judged to have violated standards of academic honesty, appropriate sanctions will be given. Sanctions include but are not limited to course failure and academic termination.

Suggested Course Outline

- Week 1:** **Lecture:** Introduction of course.
 Lab: Create list of shots in order of hypothesized render time. Shots that need longer to render will be prioritized first. Use Guide attached to syllabus to determine priority.
 Homework: Complete shot list guide. Bring in stills of highest scoring shots, already lit for next week to crit before render. Emphasize area of interest in primary light
- Week 2:** **Lecture:** Critique of shots. Lighting / Composition Workshop: how to breakdown lighting for shot importance. Review of how to add in advanced lighting effects (GI, FG, Caustics) if needed.
 Lab: Project evaluation and problem solving
 Homework: Start Rendering shots. Light More shots for next week to crit before rendering.
- Week 3:** **Lecture:** Critique of shots. Compositing Workshop: Techniques for compositing animated frames (review). Looking at Compositing Render Passes, and Still Backgrounds with Animated Characters.
 Lab: On-going project evaluation and problem solving.
 Homework: Work on Rendering shots. Light More shots for next week to crit before rendering.
- Week 4:** **Lecture:** Critique of shots. Editing Help.
 Lab: Continue to work on project.
 Homework: Work on Rendering shots. Light More shots for next week to crit before rendering. Edit Shots into animatic for next week.
- Week 5:** **Lecture:** Critique of shots. Student class presentation of thesis project edited and composed. Graduate committee review
 Lab: Guided group discussion on technical issues from project development.

Homework: Work on Rendering shots. Light More shots for next week to crit before rendering

Week 6: **Lab:** On-going project evaluation and problem solving
Homework: Work on Rendering shots. Light More shots for next week to crit before rendering

Week 7: **Lab:** On-going project evaluation and problem solving
Homework: Work on Rendering shots. Light More shots for next week to crit before rendering

Week 8: **Lecture:** Individual meeting with directing professors on project open issue. Advice and guidance
Lab: Guidance project evaluation and problem solving.
Homework: Work on Rendering shots. Light More shots for next week to crit before rendering

Week 9: **Lab:** Project evaluation and problem solving.
Homework: Work on Rendering shots. Light More shots for next week to crit before rendering

Week 10: **Lab:** Individual meetings with directing professors on Project evaluation and problem solving
Homework: Editing and DVD authoring.

Week 11: Master Thesis I: Final Presentation of revised thesis project and thesis paper.
Graduate committee review and approval.

Prioritization guide for shot list:

For, each shot, ask yourself the following questions. For every question there will be an associated number of points corresponding to a set of multiple-choice answers. Add up the points for each shot individually. Prioritize your rendering schedule by setting up renders for shots with higher point totals first, and work your way to lower point totals.

QUESTION	POINTS
1- Duration: how many frames is the shot?	
Less Than 60	10
61-120	20
121-240	30
241-360	40
More than 361	50
2- Composite Render Passes:	
for every additional render pass, extra time will of course be needed. Will you be rendering a separate....	
Ambient Occlusion pass	(add point score from Q.1)
Global Illumination pass	(add point score from Q.1)
Specular, Diffuse, Color pass	(add half point score from Q.1)
Individual light passes	(add half point score from Q.1)
3- Still Background: If your background is not animated, you can render it out as a separate image, then render your character as a sequence, and render a separate shadow pass, then composite. Can this be done for your shot?	
Yes	0
No	20
4- Do you NEED Global Illumination/ Final Gather for your shot?	
Yes	10
No	0
5- How Many lights per shot have shadows turned on?	
1	1
2	2
3	3
etc...	4+

