

UNIVERSITY OF MASSACHUSETTS AT AMHERST
OFFICE OF THE SECRETARY
THE FACULTY SENATE

UNDERGRADUATE COURSE APPROVAL FORM
(Courses Numbered 001-599)

15 Copies Required for Courses Numbered 001-499
20 Copies Required for Courses Numbered 500-599

1. **DEPARTMENT, COURSE NUMBER AND TITLE:** Art 384 Computer Animation II
2. **SCHOOL OR COLLEGE:** HFA
3. **Proposer's Name, Telephone and Email:** Patricia Galvis Assmus, 5.1902, tga@art.umass.edu
4. **Proposed Instructor:** Patricia Galvis Assmus
5. **Course Credits:** 3
6. **Are there Prerequisites?** Yes No *If yes, please specify*
Art 374 or permission of instructor
7. **What is the intended clientele?** Lower Division Upper Division
Department majors only Departmental/related majors Non-Majors
If course is intended for majors, what role will it play in the curriculum?
 Required (for BFA in Animation track) Elective (for other BFA/related majors)
8. **Complete Course Catalog Description (30 Words):**
Second of two semester sequence. Animation techniques using digital tools as applied to film, video, music and technology. Animation software (Maya) and professional compositing programs are used. Development and design of personal work is stressed. Emphasis is on creativity and professionalism. Studio course.
9. **Please attach the following materials:**
Week-by-week outline of topics covered in course (or syllabus)
List of Required readings
Description of required assignments (papers, exams, projects, reports, presentations, etc.)
Summary of course grade criteria
Selected bibliography of works used by instructor in developing course, especially recent works (as appropriate)
10. **If course has been offered as an experimental or special topics course, please comment on its evolution: (The text field below is limitless, so it will expand to encompass your response.)**
Has been taught as Art 397J for quite some time. It expands on material covered, expertise and personal creativity achieved during the preceding semester (Art374).

Upon approval of the course by the department head, one copy of this form shall be sent from the departmental office to the Faculty Senate Office to allow for the course to be published on the University's Web Site for comment.

Computer Animation II Art 384/684 (397J/697J)

Second of two semester sequence. Animation techniques using digital tools as applied to film, video, music and technology. Animation software (Maya) and professional compositing programs are used. Development and design of personal work is stressed. Emphasis is on creativity and professionalism.

Studio Course.

Prereqs: Art 374(Computer Animation 1) or consent of instructor

The goal of this course is to strengthen experience and ability with a high-end 3D software program (Maya). Building upon knowledge gained during the first semester, advanced work with special effects (particles, UV mapping, organic and self generated textures, etc.) is undertaken. Advanced tutorials are completed in conjunction with production of personal projects. Creative exploration and varied applications of 3D imaging is encouraged.

The required book (Maya for Beginners published by Alias Learning Tools) from the previous semester will be used in addition to specified chapters from the following:

The Art of Maya by Alias Wavefront; Learning Maya: The Modeling and Animation Handbook by Alias Learning Tools; Learning Maya: The Special effects Handbook by Alias Learning Tools; Maya: Foundation by Alias Learning Tools; Maya Techniques: Guide to Modeling, Texturing and Rigging in Maya by Eric Miller

Grading is a combination of semester work and participation. Attendance is expected at all class meetings. Anything over two absences will affect final grade. Two late arrivals equal one absence. Unexcused absences will each lower your grade by one grade letter level (ex. A to A-). Failure to submit final reel/project as required will result in failure to pass course. (Final reel-50%; assignments/readings-30%; in class work 10%; participation 10%).

During the semester, a wide variety of films, designs, installations and other examples of digital animation are shown, discussed and considered

Academic Honesty including but not limited to cheating, fabrication and plagiarism will be enforced per University regulations as stated in the Code of Student Conduct and Academic Regulations. Sanctions for acts of dishonesty range from receiving a grade of F on the paper/exam/assignment of in the course, loss of funding, being placed on probation or suspension for a period of time, or being dismissed from the University. All students have the right of appeal through the Academic Honesty Board.

The university is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services, Learning Disability Support Services, or Psychological Disability Services, you may be eligible for reasonable academic accommodations to help you succeed in this course. Please notify me within the first two weeks of the semester so that we may make appropriate arrangements.

NOTE: Course has been taught previously as Art 397J/697J by other faculty.

W	Feb 1	Intro, what level are you at? Basics of 3D space
M	6	Screening, Overview of Program settings
	8	Tutorial demonstration, how to use them and get the most out of them
M	13	Lab day - work on tutorial 1
	15	Presentation, applications for 3D graphics and imaging
M	20	<i>UMass closed</i>
T	21	<i>Monday Schedule</i> - Lab day - finish tutorial 1
W	22	Demonstration - features to look forward to
M	27	Lab day - start working on tutorials 2-4
	March 1	explore, explain, work on 'primitive man' tutorial
M	6	Begin production on group project
	8	story concept, production planning, group work planning & dynamics
M	13	Lab day - continue work on tutorials and finish up for presentation
	15	Individual presentations of success, failure, frustrations in 3D - Class discussion
	20 & 22	<i>Spring recess –</i>
M	27	Lab day - group project (30 second production, script provided) story board and planning
	29	<i>One hour work slots/tutorials</i> - script break down and sound acquisition
M	April 3	Lab day - production work
	5	Sound track editing demonstration - narrator recording for group project
M	10	Lab day - production work
	12	Edit, composite & finalize group project
M	17	<i>UMass closed - no class</i>
W	19	<i>Monday Schedule</i> - Final project ideas and proposal presentations
M	24	Lab day -continue work on final project
	26	Field Trip
M	May 1	Lab day - <i>Help session</i>
	3	Work in progress presentation
M	8	Lab day - <i>Help session</i>
	10	One hour assigned time slots (required)
M	15	One hour assigned time slots (required)
	17	Last class – FINAL PRESENTATIONS

Note: Keep aware of progress in class. Changes to the above schedule may occur during the semester.

COMPUTER ANIMATION II

Date	#	Class Topic	Due	Assigned
Wed 26-Jan	1	intro, overview		pre-requisite assignment
Mon 31-Jan	2	geom: single-skin	pre-req assignment	single-skin poly model
Wed 2-Feb	3	geom: single-skin		Response Paper (RP) 1 (Gjenta)
Mon 7-Feb	4	geom: single-skin	RP1	
Wed 9-Feb	5	artic: bones and IK	single-skin model	articulate the model, RP2 (The Play)
Mon 14-Feb	6	artic: bones and IK	RP2	
Wed 16-Feb	7	artic: bones and IK		
Mon 21-Feb	8	anim: walk cycles	articulated model	animate "walk" cycle, RP3 (Gas Planet)
Wed 23-Feb	9	anim: walk cycles		
Mon 28-Feb	10	shade: complex shaders	walk cycle playblast	shade and light the walk
Wed 2-Mar	11	shade: complex shaders	RP3	RP4 (Snack and Drink)
Mon 7-Mar	12	light: shadows	RP4	
Wed 9-Mar	13	prod: WIP review	HQ shots	
Mon 14-Mar	-	NO CLASS (spring break)		
Wed 16-Mar	-	NO CLASS (spring break)		
Mon 21-Mar	14	prod: debugging shots		Final Project proposal
Wed 23-Mar	15	shade: 3dpaint	FP proposal due	RP5 (More)
		prod: batch renders		
Mon 28-Mar	16	artic: shape interpolation	RP5	
Wed 30-Mar	17	anim: lip synch/facial anim		
Mon 4-Apr	18	prod: WIP review	FP milestone 1	
Wed 6-Apr	-	NO CLASS (advising day)		
Mon 11-Apr	19	geom: subdivs		
		artic: blend/bones def order		
Wed 13-Apr	20	prod: WIP review	FP milestone 2	
Mon 18-Apr	21	shade: shading networks +		RP6 (Ryan)
Wed 20-Apr	22	anim: procedural animation	RP6	
Mon 25-Apr	23	prod: WIP review	FP milestone 3	
Wed 27-Apr	24	light: global illum, tricks		
Mon 2-May	25	TBD		
Wed 4-May	26	screen final projects	FP final	

Computer Animation II Final Project Proposals

Your homework is to write a detailed proposal for your final project. This proposal will be used like a Hampshire contract for completing divisional work. Once your proposal is approved by me, all you need do is deliver what you proposed to fully meet any and all course requirements for the final project. Note that if you fail or have already failed to meet any **other** expectations for evaluation (such as absence limits or late work limits), successful completion of your final project won't guarantee you a passing grade for the course. **SEE ME** if you aren't certain of your status in this area. The course guidelines were laid out clearly at the beginning of the term and it is your responsibility to keep up with them.

There are no specific requirements for this project. In order to get my approval, however, you're going to have to propose an appropriate amount of work given your particular interests and abilities. If you would like to make another narrative short like the final projects from Computer Animation I that would be fine. But by freeing up the restrictions I'm trying to allow people with non-narrative or more specialized interests to pursue their ideas within the context of the class. Projects must reflect graduate level of academic and creative abilities.

A complete proposal contains:

- * A description of your creative goals. What is it you are trying to achieve with the project? Be as specific as you can about narrative, visual, emotional, or other targets that you will try to hit in your piece. Also, are you trying to become a better character animator? Modeler? Lighter? Storyteller? Are you trying to create more compelling compositions? **What would you like to get out of the project?**
- * A description of what you expect to be handing in as your final project. By this I mean project folders, images, movie(s), any written component, and (where applicable) resolutions, codecs, and other specifics about the aforementioned work. For

example:

"a 640x480 animation-compressed movie of approximately 5 seconds in length along with 2 rendered tests showing my character's articulation and surface texture."

* A rough week-by-week estimate of how you plan to produce this project in the remaining 6 weeks of class. You will have no other homework besides a few response papers. We're screening the final work in-class on Wed May 4, so you may want to think of what you will complete for each Wednesday starting with March 30

(FYI the others are 4/6, 4/13, 4/20, 4/27, 5/4). As a guideline, it's helpful if you consider every week to have some deliverable (storyboards, character model, environment, animatic, etc.). You should all propose projects that will push your abilities without overshooting them - this chronology will help tell you if you're being realistic about what you can do.

* You will show your work-in-progress to the class **four times** (including the "fourth milestone" when you show your complete final project on the last day of class, May 4). Each time you will have roughly 5-6 minutes to show your stuff and get feedback. These WIP milestones are required.

Your proposal must identify what you plan to have for each of the first three milestones. They are: I. Mon April 4 (two weeks from today)

II. Wed April 13 (a week and a half from I.)

III. Mon April 25 (a week and a half from II.)

* A description of any areas that you would like to see covered in class to support your project. Do take this opportunity to tailor some of the TBA classes to suit your needs!

* A valid, active email address that you check regularly so I can give you timely feedback. It is OK for your project to be a concept that's not fully developed at proposal time. If this is the case, then be sure to allocate time in your schedule for writing/design/storyboarding/etc.

Due Wednesday March 23 at the beginning of class - NO EXTENSIONS ON THIS ASSIGNMENT

Your double-spaced, typed proposal. I MUST get it promptly so that I have time to read it and get you comments. Email is acceptable, however, your proposal must be in Microsoft Word or rich text (RTF) format.