2-D Animation for Artists
CSCI S-26 (32289)/Summer 2008/4 credits
Lectures: Monday, Wednesday 6:00 – 8:30
Required Section: Wednesday 8:30 – 9:30

Instructor: Christine Dehne   **TA:** Steve Sweeney
Email: christinedehne@gmail.com   **Email:** virtual_sweeney@hotmail.com
Office Hours: By appointment only
Online Information: http://www.fas.harvard.edu/~sum32289

<u>Course Description</u>
This course discusses animation as an art form. The illusion of motion, life, and action is studied through flip books, cell animation, and the latest software. Focusing on artistic excellence, students use the Adobe CS3 suite, Final Cut Pro, and Audacity to experiment with type, character, and image animation. Students also learn basic audio recording and editing techniques. Prerequisite: Experience with Macintosh computers.

Course/Learning Objectives
1. Students will learn the basic concepts of animation and be able to define basic terminology.
2. Upon completion each student will have produced exercises as well as a final project in animation. These exercises may be retained by the student in digital and/or video form.
3. Each student will have developed a clear understanding of the basic animation techniques and concepts covered in the films and projects viewed in class.
4. Each student will have practical experience using Photoshop, Flash, and Audacity.
5. Each student will be skilled enough to take on the production of their own animation and be eligible for Intermediate level Animation courses.
6. Students will develop active, critical listening and assessment skills by participating in classroom discussions and through the completion of projects.

<u>Recommended Books:</u>
You will all want to get a basic reference book for Flash. Go to a bookstore and check out what is available. Select one that feels good to you. These are suggestions, but there are plenty of acceptable books out there:

For beginners:
Flash CS3: The Missing Manual, E.A. Vandeer Veer and Chris Grover, O'Reilly Press, 2007, ISBN:0-596-51044-6

For audio:
Designing Sound for Animation, Robin Beauchamp, Focal Press, 2005, ISBN 0-290-80733-2

For those of you who want a little more in-depth on Flash (not just Animating in Flash):
Foundation Flash CS3 for Designers, Tom Green & David Stiller, Friends of Ed, 2007, ISBN 1-59059-861-X

For those of you specifically interested in character animation in Flash:
Foundation Flash Cartoon Animation, Jones, Kelly, Rosson & Wolfe, Friends of Ed, 2007, ISBN: 159059-912-8

For those of you who are insistent on learning ActionScript:
Foundation ActionsScript 3.0 Animation: Making Things Move!, Keith Peters, Friends of Ed, 2007, ISBN: 1-59059-791-5

For those of you interested specifically in Stop Motion:
The Art of Stop-Motion Animation, Ken A. Priebe, Thomson Course Technology, 2007, ISBN 1-59863-244-2

Materials
- Sketchbook/notebook. This is yours to keep, but will be used as your place to think and process your work and will be looked at by the teacher.
- Some reliable method of backup: A USB jump/thumb drive or firewire drive and several CD-R/DVD-R discs for turning in projects.

Assignments
In this semester we will complete a series of short exercises that will help you develop skills leading towards a short final project. You must learn to develop concept and technique simultaneously. Concept is always very important, but you will also be expected to develop an awareness of technical and practical issues, as well as several avenues to troubleshoot these concerns.

The weekly assignments are designed so they can be accomplished if you put in focused effort on a weekly basis. This work requires you to be in the lab and to have attended the class preparing you for the work. The series of exercises are to introduce you to basic concepts and skills that can be applied in a more studied and personal form to the final project. The final project will take place during the last portion of the semester, with work being applied weekly both in and out of class. Topics covered include drawing, pixilation, looping and metamorphosis, the walk cycle, storyboarding and film language, character development, sound design, as well as an introduction to some computer programs used in 2D animation.

Assignment Grading
Animation takes a huge amount of work and effort. It is assumed that all members of the class will but in the time and effort to complete the assignments well. Project grades are based on the technical and aesthetic merit of your work and your creativity and content.

A = MASTERY of the topic. Exceptional thought, creativity and extra effort have been applied; great understanding and application of concepts; all requirements are fulfilled.
B = Very good creativity and effort; all requirements are fulfilled.
C = Average effort; all requirements are fulfilled; or one requirement NOT fulfilled.
D = Poor effort and/or more than two requirements are NOT fulfilled.
F = Not turned in; or, no attention to requirements, no effort.

Grading for each project will consider:
- Evidence that the student has attempted to apply the concepts discussed in class lectures to his or her assignment.
- Evidence that the student has explored concepts related to incremental movement.
- Student has made effective choices in terms of the form and content of the assignment.
- Assignment is assembled in an appropriate manner (in aesthetic terms and to facilitate use).
- Risks taken/evidence of experimentation and exploration of concepts.
- The overall aesthetic effect of the assignment, considering the limitations of the assignment and variations in students' backgrounds and abilities.

Course Grading Standards
Below are the general grading standards employed.

A- → A = 90 - 100 EXCELLENT
1. Work shows in-depth independent research and development of original ideas.
2. All aspects of the assignments are addressed in the work.
3. Work is finished on time and presented in a neat, organized manner, free of spelling and grammatical errors.
4. Student articulates thorough awareness of course concepts and the works being examined.
5. Student is respectful of other students in the course; he or she is a good team worker and makes an outstanding contribution to the group as a whole.
6. Student clearly demonstrates a desire to meet and exceed course requirements.

B- → B+ = 80 - 89 ABOVE AVERAGE
1. Work shows some research and development of ideas.
2. All aspects of the assignments are addressed in the work.
3. Work is finished on time and presented in an organized manner.
4. Student articulates awareness of course concepts and the works being examined.
5. Student contributes to the group as a whole.

C- → C+ = 70 - 79 AVERAGE
1. Work shows limited research and development of ideas.
2. Most aspects of the assignments are addressed in the work.
3. Work is presented neatly.
4. Student attends regularly, but makes little contribution to the course.

D- → D+ = 60 - 69 BELOW AVERAGE
1. Work falls short in research and development of ideas.
2. Work is incomplete in terms of page requirements and/or content.
3. Student fails to demonstrate knowledge of course materials.
4. Student is irregular in attendance and/or disruptive in class.

F = 0 - 59 FAIL
1. Work shows no research and development.
2. Work is far short of page and content requirements.
3. Work is not turned in (all assignments must be completed in order to get credit for the course).
4. Students also can be failed for missing more than four class meetings, as explained in the attendance policy.

Late Work
Late work will be marked down. You will use a full letter grade for each class meeting the project is late.

Work In Progress
We will be spending significant time discussing works in progress in this class. There are special designated times for this noted on the syllabus. These are not finished pieces but works in progress. Works in Progress are not graded. You can lose points however for not having a WIP for the class to discuss.

Attendance/Class Participation Grading
Attendance is mandatory. More than one unexcused absence will lower your grade. Make sure to contact me if you are going to be absent. Absence is not an excuse for coming to the next class unprepared. You must contact a classmate or the professor to find out what you missed. Habitual lateness will also reduce your grade.

This is a class where students are expected to show both complete and trial cuts of their own work to the class. Thoughtful feedback is essential to improving your work and the work of your fellow classmates. I will be grading your participation based on how helpful I think your comments or questions are to addressing relevant concerns of the work at hand. I will be taking notes on this throughout the semester. Failure to participate in discussions and critiques will affect your semester grade.

Course Grading Breakdown
Course grades reflect your growth, assignment completion, contributions to class discussions and critiques, and attendance.
Attendance/Participation: 30%
Projects and Exercises   70%

        Exercise #1 - Flip book   = 5%
        Exercise #2 - Cutout Animation = 10%
        Exercise #3 – Walk Cycle   = 10%
        Exercise #4 – Metamorphosis = 5%
        Exercise #5 – Animated Word = 5%
        Exercise #6 – Pixilation   = 10%
        Final Project   = 25%

Disability Statement
If you believe that you have a disability that may warrant accommodations in this class, I urge you to notify me immediately so that together we can work to develop methods of addressing needed accommodations in this class. You also must contact Joanne Eno, the Disabilities Services officer, at 495-0977. You can find the relevant forms at: http://www.summer.harvard.edu/2008/forms/

Graduate Credit
Graduate students are expected to achieve a more in-depth understanding of the topics, demonstrate higher knowledge and skills, and show greater independence of thought and application of concepts than what is typically required of undergraduate students.

Incompletes
Incompletes will only be granted in extreme situations. Do not count on getting one.

Academic Misconduct
Plagiarism, cheating and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions that may be imposed through the regular instructional procedures as a result of academic misconduct, the instructor has the authority to assign an F or a zero in the course. For more information on the consequences of plagiarism please consult Harvard's student handbook. (http://www.summer.harvard.edu/2008/enroll/enrolled/responsible.jsp#integ)

Assignments
Exercise #1
Flip Book (with at least 30 different stills)
DUE: July 2

Make a flip book consisting of at least 30 frames (this represents 1 second of video time) in which something IMPOSSIBLE happens.
Suggestion: use index cards or a pad of paper with some tooth to it.

Remember:
- In your animation projects you are not tied to physical reality
- The more in-between frames to an action, the smoother that action will be
- The more frames, the slower that motion will be
- Different images can be put in sequence next to one another to create a jittery animation

Some suggestions:
- Use the skills or media you already know to generate your individual frames: draw, paint, play on the computer, xerox, shoot photos, print, collage, scan simple cutouts, etc.
- create a short narrative or story
- create a self-portrait
- depict an explosion of movement
- create an abstract dancing of shapes or designs or texts
- create a visual pun
- make an inanimate object come to life
- reverse or manipulate TIME (make something go backwards, too slow, too fast)
- create a "metamorphosis:" create a relationship between two objects/people by having one turn into another
- animate a gesture or action

Exercise #2
Cutout Style Animation (with at least 60 frames)
DUE: July 9

Make an animation in Flash or Final Cut Pro using the techniques of Terry Gilliam. Scan in images using a flatbed scanner or create them within Photoshop or Flash.

1. Scan images and cut out parts into Photoshop to create your character(s), props, and background or create a similar look in Flash.
2. Assemble your character(s).
3. Create your background layers and separate props.
4. Using Final Cut Pro or Flash animate your character(s) and prop(s) in the background layers.
5. Add audio that will support your movement. The better your audio mix the better your animation will work.
6. Export your final animation.

Exercise #3
Walk Cycle
DUE: July 16

Create a character and his/her/its Walk Cycle in Flash or Final Cut Pro.

Exercise #4
Metamorphosis
DUE: July 21

Create 2 objects in Flash and use shape tweening to morph one into the other in 30 frames. You may need to create some of the in-between states yourself to guide what the metamorphosis looks like.

Exercise #5
Animate a word
DUE: July 23

Choose a word and use Flash to animate it so that it demonstrates its own meaning. Action verbs work well. Think about what an animation of "drip" or "absorb" or "bounce" looks like.

Exercise #6
5 Second Pixilation Loop
DUE: July 28

- Create a 5 second "Pixilation" video loop with audio.
- Take still images and import them into FCP
- Focus on the movement!
- Show me something impossible!
- Make sure it will loop.
- Add sound to your loop.
- Export your final animation

Final Project
Your final animation
DUE: Aug 11

Choose one of your projects to develop further.

<u>**Course Schedule**</u> (may be revised, with warning, throughout semester)

June 23 – class 1
      Introduction to class and to one another
      Syllabus review and course expectations
      View brief examples of possible applications of animation
      Optical Toys: Zoetrope, Praxinoscope + Stroboscope Animation
      Basics of Photoshop
      Introduction to Eadweard Muybridge and Animal Locomotion

   For next class:
      Find an animation that entertains you and bring it to class
      Start working on your flip book
      Choose 3 Muybridge sequences to work with and begin preparing images for animation
      Begin brainstorming about your own project ideas and be ready to discuss in class next week

June 25 – class 2
      Discussion of animations brought by students
      Finish Muybridge sequences + turn in
      Basics of animation 1: timing, movement and perception; loops and metamorphoses.

  Section June 25
  TBA

   For next class:
      Develop a proposal for your final Project. Who are the "characters"/What is the "story"?
      Continue working on your flip book
      Find an animation that entertains you and bring it to class

June 30 – class 3
      Discussion of animations brought by students
      Basics of animation 2: bounce, weight, timing, squash and stretch, follow-through
      Drawing on Paper and in Photoshop

   For next class:
      Finish working on your flip book
      Continue thinking about your final Project. What do your characters/objects look like when they move?

July 2 – class 4
      Discuss/Critique flip books
      Intro to Flash – Interface, settings, drawing, etc.
      Character Development – Cutout animations

  Section
  TBA

   For next class:
      Start a cutout animation

July 7 – class 5
> Photoshop/Flash drawing skills
> Discuss cutout animation ideas
> Foley Sound
> Audacity, audio editing and recording

>   *For next class:*
> > Complete cutout animation
> > Complete soundtrack for cutout animation

July 9 – class 6
> Critique cut out animations
> The Walk Cycle – process and planning
> Introduction to Final Cut Pro
> More on Flash – Interface, settings, drawing, etc.
> Creating an environment

>   **Section**
>   **TBA**

>   *For next class:*
> > Develop ideas for backgrounds for your final Project
> > Create a character for the Walk Cycle exercise (character of your choice) in Flash or FCP.

July 14 – class 7
> Discuss Walk Cycle
> Work in class on Walk Cycle
> Metamorphosis exercise in class using Flash

>   *For next class:*
> > Finish Walk Cycle. Don't forget audio!
> > Keep developing your project ideas!

July 16 – class 8
> Critique/discussion of Walk Cycle
> More on Flash – Interface, settings, drawing, etc.
> Metamorphosis exercise in class using Flash

>   **Section**
>   **TBA**

>   *For next class:*
> > Finish metamorphosis exercise
> > Keep developing your project ideas!

July 21 – class 9

       Discuss/critique metamorphosis
       Character Development – animated text

   For next class:
       Create an animated word
       Firm up your project ideas and be ready to discuss them next class

July 23 – class 10

       Discuss/Critique Animated word
       Pixilation

  Section
  TBA

   For next class:
       Finish pixilation exercise

July 28 – class 11

       Discuss/critique pixilation assignment
       Work on Projects in class

   For next class:
       Continue work on Project

July 30 – class 12

       Discuss final projects/critique work in progress
       Demos as needed
       Work on Projects in class

  Section
  TBA

   For next class:
       Continue work on Project

August 4 – class 13

       Discuss/critique homework
       Demos as needed
       Work on Projects in class

   For next class:
       Continue work on Project

August 6 – class 14
      Discuss/critique homework
      Demos as needed
      Work on Projects in class

 Section
 TBA

 For next class:
      Continue work on Project

August 11 – class 15
      Final Project due - critique