

CINE 320.402 - History of Computer Animation | Linda Simensky

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ARTH 301 | ENGL 291 | FNAR 320

Fall 2014 Monday 4:30 - 7:30pm

244 Fisher-Bennett Hall

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Course Overview

This course will look at computer animation as an art form, a series of technological innovations and an industry. We will explore the way in which artistic, technical, historical, and cultural conditions have shaped the development of computer animation. Topics will include the impact of early motion graphics experiments in the sixties, the contributions of university- and corporation-funded research, commercial production, and the rise of Pixar. We will consider the companies and personalities in computer animation who have shaped the art form and continue to influence it, the contributions to computer animation from visionaries around the world, and current day applications of animated imagery. Throughout the course, we will screen important works from the canon of computer animation, including the earliest computer-animated shorts, scenes from *Beauty and the Beast*, the first Pixar shorts, *Toy Story*, *Final Fantasy* and works done internationally to forward the art and the industry.

Required Reading

Moving Innovation: A History of Computer Animation by Tom Sito will be available at Penn Book Center, 130 South 34th Street. Other readings will be posted on Canvas and will be on reserve in the library.

Grading

Grades will be based upon the following:

Attendance (15%)

Participation and discussion (15%)

Review paper (20%)

Three Opinion Papers (15%)

Research project (35%)

Discussion and Blog

There will be discussions during most classes. Students should be prepared to discuss the readings and screenings. Your preparation and participation in the discussion will account for 15% of your grade. When possible, we will also discuss current events in animation.

The class will also have a blog on Canvas for posting films and information. Students are encouraged to utilize and contribute to this blog. This blog is for sharing films, articles and observations. (This blog is not part of your grade.)

- Sept 8 **Introduction**
Animation history is the history of innovation, art, film, and commerce.
The vocabulary of the industry. Animation production and timelines.
A glossary will be posted on Canvas.
- Sept 15 **Experimental Animation in the late 1950s and early 1960s**
Reading: Sito, Chapter 2
- Sept 22 **Bell Labs, Corporations, Universities, Labs, and Star Wars**
Readings: Sito, Chapters 4, 5, 8
- Sept 29 **The 1980s-1990s: Commercials, Early Video Games**
Readings: Sito, Chapters 7, 10
Furniss, Chapter 20, "Computers, New Technology
and Animation" (Canvas and Library)
- Oct 6 **Early Uses of CGI in features**
Readings: Sito, Chapters 9, 12
Opinion Paper #1 due
- Oct 13 **Pixar: the early years**
Readings: Sito, Chapter 13
Price, Chapter 5 (Canvas or Library)
Catmull, Chapter 1 (Canvas or Library)
- Oct 20 **Independent Animation, National Film Board and music videos**
Readings: Robinson, Animators Unearthed, pp. 1-8, 33-44, 133-144
(Canvas or Library)
Review Assignment due
- Oct 27 **Milestones in Computer Animation on Television**
Readings labeled "Milestones 1" and "Milestones 2" posted on Canvas
- Nov 3 **Pixar: the features**
Reading: Sito, Chapter 14
Not required reading:
http://www.upenn.edu/gazette/0913/feature1_1.html
Opinion Paper #2 due
- Nov 10 **Animation for Games / Motion Capture / Animation on the Web**
Readings: Sito, Chapter 11
Marx, pp. 139-147 (Canvas or Library)
Wells, pp. 134-5, 140-1 (Canvas or Library)
<http://www.newyorker.com/magazine/2014/04/28/pixel-perfect-2>

- Nov 17 **International Animation**
Reading labeled "International," posted on Canvas
- Nov 24 **The Shift from Hand Drawn to CG**
Reading: Jones and Oliff, pp. 18-28 (Canvas or Library)
- Dec 1 **Feature Animation**
View a computer animated feature film you have not already seen. A list of possible films will be handed out in class and posted on Canvas.
Opinion Paper #3 due
- Dec 8 **The Future of Computer Animation**
- Dec 15 **No class / Research papers due**

Screenings

Most films will be screened in class. However, some films that are posted on the web may be assigned in class during the semester. You will also view a feature film for the class on December 1.

Assignments

Commercial, film or television review assignment Due October 20

Choose a computer-animated film, TV show, short film, or commercial and review it.
3-5 Pages

Three opinion papers

Choose three readings over the course of the semester. Write 1-2 page(s) reacting to the reading you have selected. I am interested in your opinions, observations and personal thoughts on any of these readings.

For the first opinion paper, choose one of the September readings. This paper is due October 6.

For the second opinion paper, choose one of the October readings. This paper is due November 3.

For the third opinion paper, choose one of the November readings. This paper is due December 1.

Research project

Due December 15

Your research project will involve selecting a computer animation topic and researching it in depth.

You can choose an animated film or filmmaker, and then place your chosen subject within its individual historical context. For example: Why was this work made? What was the filmmaker's source of inspiration? How did world events, technology, other visual artists or filmmakers influence this work? What was the relationship between the filmmaker and his/her contemporaries?

Another option is to choose an area outside of the entertainment industry that utilizes computer animation, such as forensic, legal or medical CGI, and analyze that area.

You can also suggest topics.

All topics must be submitted to me by November 3, 2014. Please write the topic out as a logline, and then write one paragraph about what you propose to research. You can hand me your idea in class or email it to me. I will approve the topic through email.

The research project should be 10-12 pages, double-spaced, not including images. A bibliography is required with at least two print sources. **The project is due no later than December 15 by email. (Papers can also be handed in on the last day of class.)**

Bibliography for Readings

Catmull, Ed. *Creativity, Inc.* New York: Random House, 2014.

Furniss, Maureen. *Animation - Art and Industry.* Herts, UK: John Libbey Publishing Ltd., 2009.

Jones, Angie and Jamie Oliff. *Thinking Animation: Bridging the Gap Between 2D and CG.* Boston, MA: Course Technology, 2006.

Marx, Christy. *Writing for Animation, Comics, and Games.* Burlington, MA: Focal Press, 2007.

Price, David A. *The Pixar Touch: The Making of a Company.* New York: Vintage Books, 2009.

Robinson, Chris. *Animators Unearthed: A Guide to the Best of Contemporary Animation.* New York: Continuum, 2010.

Sito, Tom. *Moving Innovation: A History of Computer Animation*. Cambridge, MA: The MIT Press, 2013.

Wells, Paul. *The Fundamentals of Animation*. Lausanne: AVA Publishing SA, 2006.

Web Sites

There are a number of interesting animation web sites to peruse, depending on your areas of interest.

Here are some recommendations:

For computer animation and computer graphics:

www.pixar.com

www.siggraph.org

www.cgw.com

For current animation industry news:

www.awn.com

www.awn.com/vfxworld

www.animationmagazone.net

For animation history:

www.cartoonresearch.com

www.cartoonbrew.com

For early animation:

www.rarebit.org

For experimental and abstract animation:

www.iotacenter.org

You might also want to check out:

<http://cg.cis.upenn.edu/history.html> and <http://cg.cis.upenn.edu/newsletter.html>

<http://www.seas.upenn.edu/about-seas/eniac/>

Also, nearly every animation studio has a company web site.