2D Animation Course Outline

# CBEDS Code

5702

Industry Sector

Arts, Media, and Entertainment

Career Pathway

Design, Visual, and Media Arts

**Academic Credit**

UC Area F Visual and Performing Arts credit

Catalogue Course Description

Class begins by exploring various forms of visual arts simply by looking and listening. After this introduction we discover the many purposes of art and the things in our world that influence its creation. We learn that artists have visually communicated motion and time passing in still imagery since ancient times. We look at the timeline of animation development and all of the inventions as it progressed into the current technologies of computer generated animation, including animation pioneers along the way. We introduce trends in animation around the globe as well cultural, social, historical influences on this visual art form.

Lessons will include class lectures, demonstrations and hands-on art activities. Prior to creating animations, students learn the elements of art and principles of design, how to recognize them in visual artworks and how to incorporate them in their own work. Students use traditional studio art supplies, industry standard software, and computers as tools to create art and animations. Students create animation shorts from abstract to cartoons and are introduced to many methods of animation including photomation, papermation, rotoscoping, and computer-generated animation. A major segment of this class will focus on cartoon animation, which will be simplified to its basic components. The goal of all projects is to visually articulate, express, and communicate ideas, concepts and personal experiences in creative, meaningful ways.

Creativity, originality and freedom to be personally expressive are fostered. Artistic talent, technical skill, and workplace best practices of a professional animator are heavily instilled in students. Students will meet and talk with industry professionals and will see that in order to become a successful animator, foundations in traditional art are required. The final class product will be an interactive portfolio that will showcase their best work

School Information

Mission Valley ROP

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Background Information

Context for Course

Demand for technology-based computer arts classes is in high demand. This class is unique because it begins by focusing on art and using animation as a method to create expressive art animations. Commercial animation is a component of this class as well.

History of Course Development

Mission Valley ROP instructors have taught 2D Animation at multiple partner campuses starting in 2002. The course was developed based on demand from students who wanted to fulfill an art requirement, but had interest in areas other than strict studio art. Following the initial offering, interest in 2D Animation grew exponentially.

Valerie Montano laid the foundation for the course outline. In the current form, the outline is the product of industry advisors and past and present instructors including: James Briano, Thomas Bartholomew -Couts, Bryan Farley, and Elba Rios.

Course Purpose

Students will:

Explore visual arts in a variety of genres. Purpose — students have an opportunity to see something that they may never have seen had they not taken the class, and to develop an interest and appreciation for the arts that might continue through adulthood.

Explore the many ways in which animation can merge with a variety of art genres. Purpose — Students understand that connections between a variety art genres offer exciting possibilities outside what one might typically envision when thinking “animation” (which is usually cartoon animation).

Learn that art serves many purposes in society. Purpose —Students realize the value of art in society as a form of universal visual language that has existed before written forms of language.

Develop student’s artistic skill using the elements of design and principles of art as a foundation. Purpose — Students will become better communicators using art as a method and form of visual language.

Identify elements of art and principles of design applied in works of art and animations and discuss how these influence the viewer’s perception. Purpose — To teach students to begin to be fluent in the language of visual arts and to form educated opinions about the intended content and meaning in artworks.

Recognize and identify pioneers in kinetic / animated art. Purpose — Students develop an ability to differentiate artists and their styles, they recall facts and details about particular pioneers, and they are inspired by them when creating works of their own.

Utilize the standard process for determining art’s aesthetic value and demonstrate the ability to use necessary descriptive vocabulary. Purpose — Students can consider all aspects when critiquing work of recognized artists, fellow classmates, and their own work, and clearly articulate thoughts.

Explore and understand creative processes for making art. Purpose — Problem-solve from the beginning of a project through completion.

Understand how various visual arts influence animation. Purpose — Students see how one art inspires another.

Express concrete ideas and purposeful content in animations. Purpose — Students create art work and animation that means something to them and others.

Create a portfolio showcasing strongest work. Purpose — Students work on each project with the final product of a portfolio in mind, and understand the purpose of a portfolio.

Texts & Supplemental Instructional Materials

Texts

Beiman, N., Prepare to Board! Creating Story and Characters for Animated Features and Shorts, Focal Press

Blair, P., Cartoon Animation (The Collector's Series), Walter Foster Publishing

Solomon, C., Enchanted Drawings: The History of Animation, Random House

Whitaker, H., and Halas, J., Timing for Animation, Focal Press

White, T., The Animator's Workbook: Step-By-Step Techniques of Drawn Animation, Watson-Guptill

Williams, R., The Animator's Survival Kit, Faber & Faber

Supplemental Texts

Johnson, O., The Illusion of Life: Disney Animation, Disney Editions; Rev Sub Edition

Online Resources

Color Themes and Values  
<http://www.kuler.adob.com>

Color Theory  
http://webdesign.tutsplus.com/articles/an-introduction-to-color-theory-for-web-designers--webdesign-1437

The Color Wheel  
http://en.wikipedia.org/wiki/Color\_wheel

Software

Adobe Creative Suite: Dreamweaver, Fireworks, Flash, Illustrator, Lightroom 2.0, Media Encoder, and Photoshop

Apple Safari for PC, Google Chrome, Internet Explorer, Mozilla Firefox

Google Apps for Education

Microsoft Windows & Office

Course Outline

# Animation as an Expressive Visual Art Form

## Visual Art Comes In Many Forms -- Let’s take a look at some of them

### Fine Art - Paintings, Sculptures, Printmaking, Collage, Photography, Multi-media and animated art.

### Industrial Design - Product design from automobiles to simple household items and animated product promotions explaining features and construction.

### Interior Design - Residential, Trade Show Exhibit Design, Commercial and animated walk-throughs to sell potential clients on services

### Digital Arts - Graphic Design, Illustration and animations for cartoons in movies and for television, product advertisements, video games, educational CD’s, websites all of which could be animated.

## Why We Make Art -- Let’s analyze the purposes and functions of art.

### Express personal emotions, life experiences, and opinions about politics, social issues, economic conditions, and personal beliefs about religion

### Document cultural traditions, historical events

### Record and preserve visual data

### Propaganda or social commentary

### Commemoration of an important event

### Persuasion, advertising and marketing

### Storytelling

### Art for utilitarian purposes

### Art for art’s sake – “l'art pour l'art”

### Art for entertainment

## Story telling with pictures - a precursor to animation -- Let’s look at how stories can be communicated through a series of sequential pictures.

## Motion Depicted in Ancient Art -- Let’s go back in history and see how ancient artists attempt to convey movement, motion and time passing in artwork.

### The need to communicate movement, motion and time

#### Movement is a vital function in every form of life and art can help express the vital part of all living things.

#### Movement in art can help to communicate a story or details of an event.

#### Movement in art can serve as an educational tool to record and communicate a process.

### Examples in ancient art

#### Cave paintings - France, Africa, Asia, Mexico - animals depicted in motion, people depicted in battle and ceremonial celebrations

#### Pottery - Iranian pottery with wild goat, Greek red figure pottery of athletes, Etruscan vase with horsemen.

#### Paintings - Egyptian wall painting “circa” depicting two wrestlers. Chinese tile painting from tomb lintel men in conversation, Japanese depict movement through a landscape.

#### Sculpture - Roman column of Trojan depicting a battle as it spirals around column, Indian sculpture of Shiva dancing, Greek sculpture of Laocoön and his sons.

## Foundations of Art -- Let’s learn about the components that make great art.

### Elements of Art (Sensory components)

#### Line, Shape/Form, Texture, Value, Color, Space, Scale

### Principles of Design (Organization of works of art)

#### Movement, Repetition, Rhythm, Contrast, Variation, Balance, Emphasis, Unity, Figure dominance and Ground, Similarity, Proximity, Continuity, Closure, Area, Symmetry

### Color Theory

#### Color Terms: hue, tint, value, shade, saturation, contrast, cool, warm, accent, highlight, shadow

#### Color Wheel: order of colors on color wheel and its application towards art and design as it relates to color schemes.

#### Color Schemes: primary, secondary, analogous, tertiary, complimentary, neutral, achromatic, monochromatic, and clashing.

### Perspective - grids, horizon line, vanishing points, scale, points of view

### Space and form

#### Foreground, and background, Chiaroscuro

#### Light source, highlights, shades, shadows, scale, depth (depth of field)

#### Positive and negative space

## Pioneers in Kinetic / Animated Art -- Let’s look at this original, exciting ever-emerging art form

### Abstract Kinetic Art - from artists such as:

#### Oskar Fischinger – Fantasia

#### Norman McLaren – dots

#### Len Lye - a color box

#### Mary Ellen Bute - animates to Bach Sycronomy no. 4

### Surreal Kinetic Art – from artists such as:

#### Ladislaw Starewicz - Fleur De Fougere (part 3)

#### Suzan Pitt - Jefferson Circus Song

#### Flicker Light Studio - Bound

## Art Criticism -- Let’s learn the standard process for determining art’s aesthetic value.

### Identify - the subject matter, the classification

### Describe - what materials are used, elements of art and principles of design

### Analyze - compare and contrast similarities and differences, symbols

### Interpret - the message

### Judge - the aesthetic value

## Visual Art Forms Influence Animation -- Let’s look at various art forms that have inspired styles and methods of animation.

### Ancient art inspires historically themed game designs

### Chinese paper cutting and origami inspire “papermation”

### Japanese comics inspire Anime and Manga animation

### Photography inspires “pixilmation” and “animutation”

### Sculpture inspires “claymation”

### Sand art inspires “sandamation”

### Pin art inspires “pinmation”

## The creative process -- Let’s take an in depth look at the creative process.

### Inspiration - find something that interests you, emotional moves you, is meaningful to you

### Concept / Intent - develop an idea based around your source of inspiration so that you can express your idea by sharing it with others

### Brainstorm and Sketch - jot down notes, thoughts, words and images that come to mind when thinking about your concept.

### Research / Interview - do interviews and research to make your concept most effective and historically accurate if history applies.

### Create - create your art.

### Analyze and Modify - access your art for based on initial concept and intent. Perhaps get opinions of others and revise as needed.

### Display - display your art for others to see and experience that way your efforts serve a purpose of communicating with others.

# Traditional Cartoon Animation and Commercial Animation

## History of Traditional Animation (an overview) -- Let’s see how animation methods and techniques progressed over time and learn about the visionaries who helped develop it.

### Traditional flip book animation

#### Paul Roget - invented the 2-sided disc called the Thaumatrop.

#### Henry Van Hovenbergh - first to patent his flipbook animation

#### Max Skladanowsky - invented first serial photographic flipbook animation

#### Herman Casler - invented first mechanized form of flipbook called the Mutoscope

#### Henry William Short - invented a flipbook placed in a metal holder to facilitate flipping called the Filoscope.

#### Dr. Joseph Antoine and Dr. Simon Rittrer - constructed a machine called a phenakitstoscope.

### Traditional stop-motion animation (thanks to the invention of the projector, motion camera the Kinetsocope by Thomas Edison)

#### James Stuart Blackton - first to animate photographs of drawings on black board.

#### Emile Cohl - first to animate paper cutouts.

#### Art Clokey - first to animate clay characters.

#### Winsor McCay - first to animate hand drawn cartoon such as Gertie the Dinosaur and Little Nemo in Slumberland

#### Walt Disney and Warner Brothers develop cartoon studios

##### Walt Disney - patriotic animations, Mickey Mouse and first color cartoon called Flowers and Trees.

##### Warner Brothers - Looney Toons, Bugs Bunny

### Computer Generated Image Animation (CGI Animation)

#### Fred Parke - first to create computer generated facial animation.

#### Nick Castle - directs animation of “The Last Starfighter” and first to use computer- generated characters in place of models.

#### Pixar Company - Toy Story is the first full-length 3D CG animated film

## Culture Influences on Art and Animation. -- Let’s look at how certain aspects of culture influences visual arts

### Mass Media, Economy, Social Issues, Politics, Science, Technology, Inventions, Religion and Influential People.

### Current visual art trends and their most significant influences for example:

#### Animation arts 3-d manufactured actors/characters that look human such as “Polar Express” movie

#### Flipbooks for refreshing, cost effective way for companies to advertise and market. For example, Macy’s promoted the recent Macy’s day parade using a flipbook animation.

### Global approaches to animation.

#### Europe - sample animations from Britain, France, Italy, Spain, Russia, Croatia

#### North and South America - sample animations from Argentina, Cuba, USA, Canada

## Cartoon Animation Fundamentals -- Let’s look at the basic building blocks to creating a cartoon animation.

### Concept

#### Define purpose of animation

#### Define audience for animation

#### Write a story / script - intro, plot, conclusion

#### Define main characters in story

### Design preplanning

#### Determine the artistic style of the animation

#### Determine method for creating art in animation

#### Develop characters physical characteristics

#### Design environment for each scene e. Select appropriate sound effects

### Proposal of ideas

#### Create character sketches of main characters from front, side and back

#### Create storyboards - map out how the animation will progress scene by scene

### Execute Animation - use storyboard as guide, create art for every scene, animate, add sound, critique, revise and share with audience.

## A Career in Animation

### Portfolio

#### Represent your greatest achievements and abilities including traditional art skills in addition to animation.

#### Create a digital portfolio and hard copy samples

#### Indicate in writing your desires, goals, interests, skills, abilities, qualifications and experience.

### Industry Professionals job titles and roles

#### Writers, Directors, Traditional Artists, Storyboard Artists, Character Designers, Animators, Photographers, Producers, Design and research

### Professionalism in the workplace

#### Collaborate to achieve common goal

#### Be dependable, cooperative and committed

#### Communicate effectively

#### Take initiative to achieve

#### Maintain honesty and integrity in regards to originality

#### Be open to accepting constructive criticism

#### Take pride in your image by dressing in a professional manner

#### Maintain a professional demeanor

#### Respect all co-workers

## Final Exam

Key Assignments

# Writing assignment

## Internet research and on 20th century artwork that conveys dynamic motion (homework). Students work individually. Project completion time: Approximately 1 week.

# Writing assignment

## Compare and contrast ways in which different media cover the same art exhibit. Art exhibit will be based on one I select in which coverage in all three areas can readily be found on the Internet and findings posted on class Blog.

# Writing assignment

## Identify the similarities and differences in purposes of animations created by select cultures.

# Writing assignment

## Explain ways technology influenced the styles of digital animation and how it has affected a variety of digital art genres.

# Writing assignment

## Compare and contrast ways in which different media cover the same art exhibit. Art exhibits will be selected by the instructor, ensuring all three areas can readily be found on the internet. Writing will be done on the class Blog.

# Writing assignment

## Analyze works of art and discuss degrees of movement expressed. Mention what is unique about the artist’s creative expression and interpret the artist’s purpose such as self-expression, visual storytelling, or recording process. Include what others have said about the art and note any difference of opinions they may have.

# Abstract animation to music focusing on dominance and subordination.

## This animation must be entirely abstract. The goal is to animate shapes and colors whose movements coincide with music the students choose. A variety of music files will be provided. The music will contain primary dominate sounds and secondary subordinate sounds. Students must include a motion tween, tween on a path, shape tween, blending transition, and looped animation. Students will work in pairs. Project completion time: Approximately 1 week.

# Photographic frame-by-frame animation sequence

## Students take a series of photographs where the subject is moved incrementally over time. For example, students could photograph an ink drawing, a sand castle, and a clay sculpture in various stages of development, or an object moved slightly for each photograph. Photos are taken as homework and assembled in animation software during class. Students work individually. Project completion time: Approximately 1 week.

# Word interpretation animation with cross cultural or universal theme

## Students create an animation that visually articulates what someone’s written or spoken words mean to them. Students may choose to interpret a poem, a piece of literature, or even a segment of a historic speech. Students will choose an artistic style that best lends itself to expressing an interpretation of the words. Words must be limed to a maximum of 40. A significant amount of planning and preparation is done as homework. Students work individually. Project completion time: Approximately 2 weeks.

# Advertisement animation for school event or production

## Students create an advertisement for a school event or production that includes illustrated versions of performers and characters involved. The animation will essentially become a flyer with dynamic movement, which could potentially serve as an e-mail, or web based marketing piece. Students work in pairs. Project completion time: Approximately 2 weeks.

# Cartoon animation

## Students use a use limited color palette and simplified characters in terms of visual detail. Projects must follow all stages of “The basic building blocks of animation.” Each major stage of development must be submitted by specified deadlines, and approved by the instructor before proceeding. A significant amount of planning and preparation done as homework. Students work individually. Project completion time: Approximately 2 weeks.

# Cutout cartoon animation addressing a social issue

## Students conceive of, plan, and produce a stop motion animation. The class will operate as a team would in the workplace. Students will perform the roles of writers, directors, artists, animators, photographers and producers. Proposals for the animation will be submitted and narrowed down to one. The characters and scenes of the set will be constructed out of household throw away paper and plastic items such as paper grocery bags, card board boxes, and plastic containers, and then photographed during class. The animation will address a social issue determined. Students will work as a team. Project completion time: Approximately 5 weeks.

# Student Portfolio

## Students create an interactive piece that showcases their best work. Students will create an interface which includes roll-overs and/or buttons to add user interactivity. Students will create links to their art and animations, which will also include brief statements about inspiration and the creative process.

# Logbook / Sketchbook

## This book will be include note taking and record of creative process including creative brainstorming, written proposals of animation concepts, content and purpose of animation, thumbnail sketches, character sketches, proposed artwork samples, detailed visual concepts, and rough story boards. Ongoing projects are submitted regularly as a method of communication between teacher and student.

# Quizzes, Midterm Exam, Final Exam - Comprehensive

Instructional Methods and Strategies

# Primary Instructional Methods/Strategies:

## Lectures

## Demonstrations of software/hardware usage, tools, methods and techniques

## Demonstrations of traditional studio art materials, tools, methods and techniques

## Hands-on digital and traditional animation exercises based on demonstrations

## Project-based learning

## Teacher involvement throughout development and creative process of projects

## Internet research

## Project Critiques — in real time and on blogs

## Class Discussions and debates — in real time and on blogs

# Additional Instructional Methods/Strategies

## Assigned readings and tutorials

## Assigned class blog reading and writing

## Assigned internet, wiki readings, blog readings and research

## Video presentations

## Guest speakers working in field of animation (real world application)

## Class field trip

Assessments Including Methods and Tools

# Assessment of the following based on rubrics and guidelines expressed to students:

## Log Book / Sketch Book

## Assigned work on class Blogs and Wikis

## Digital art hands-on exercises

## Traditional hands-on art exercises

## Software tutorial work

## Digital animation exercises and projects

## Written Research Paper

## Written and Verbal Critiques (their own work, fellow student work and work of masters/ professionals)

## Quizzes, midterm exam and comprehensive final exam

Artistic Perception

Students spend a great deal of time learning the elements of art and principles of design. They communicate ideas and perceptions of visual aspects from art to the environment in logbooks, class Wikis, class Blogs, class discussions, class debates, and group discussions. For example, when learning to create effective background scenes in animations, students will look at a photo of a mountainous landscape transitioning from vivid sharp detail in the foreground to less vivid less detail in the background. They will then compare this photo with two depictions of a mountainous landscape - one that has great depth and one that is flat. They will analyze, discuss and write about the three in comparison. Aspects of dominance and subordination will be reviewed and concepts applied to the backgrounds they create. They will apply these skills to future art projects and art critiques. 1.1 and 1.2

After looking at examples of motion conveyed in art, students analyze additional works of art and discuss degrees of movement expressed. They express what is unique about the artist’s creative expression and interpret the artist’s purpose, such as self-expression, visual storytelling, or recording process. They will include what others have said about the art and note any difference of opinions they have. They are assigned a research and writing assignment on 20th century artwork that conveys dynamic motion and describe how particular art elements and principles of design have been used. They will do this with their own work and the work of their classmates throughout the course. 1.3, 1.4 and 1.5

Students will have many instances where they will compare and contrast traditional work with digital artwork. For example, after learning about the history of animation and how it has evolved from traditional animation to digitally generated animation, students are given a writing assignment to compare and contrast an animation done traditionally with one that is computer generated. These writing assignments will be posted on the class Wiki. Students will reflect on animation and writings of two fellow students. 1.6

Creative Expression

Students will use the elements of art and principles of design through the course of the class in all of the projects they produce. 2.1

Students will create a portfolio showcasing work that is carefully crafted and refined. Portfolios will display technical skill using industry standard software. 2.2

Students will go through a revision process to create animations based on on-one-on guidance, self-critiques, and critiques from fellow classmates. All aspects of the animations will be reviewed and refined including artistic aspects, storytelling, and technical aspects such as timing and sound. 2.3

Students will work on drawing skills in class and will have several observational drawing assignments as homework. Works will be reviewed and revised. 2.4

Students will create an abstract animation to music focusing on dominance and subordination. 2.5

Students will put great thought into the concept, development and production of a cutout animation made from recycled paper product packaging that addresses a social issue. 2.6

Historical and Cultural Context

Students will learn how culture influences animation and will view global approaches to animation from Europe, North and South America, and Asia. Student will have group discussions and reflective writing in their logbooks about similarities and differences in purposes of particular art and animations from various cultures. 3.1 and 3.4.

Students will learn about the history of animation and how it has progressed due to discoveries in technology. They will write about how technology influenced the styles of digital animation and how it has affected a variety of digital art genres. 3.2

Students will learn about current visual art trends in animation and will explore how history and culture influence visual arts. Identifications and descriptions will be required on quizzes and a final exam. 3.3

Aesthetic Valuing

When discussing and discovering how certain aspects of culture influences visual arts, students will articulate how personal opinions and perspectives influence interpretation of artworks. 4.1

Students will be introduced to pioneers in kinetic motion art. They will compare how meaning in early animations might be viewed and interpreted as if they were created during contemporary times. 4.2

After looking at examples of motion conveyed in art, students analyze additional works of art and discuss degrees of movement. They express what is unique about the artist’s creative expression and interpret the artist’s purpose such as self-expression, visual storytelling, or recording process. They will also include what others have said about the art and note any difference of opinions. They also will critique fellow classmate’s work in an environment that fosters difference of opinion and interpretations. 4.3

Students will critique, judge, and refine each of their projects at various stages of completion. For each major project they will write a brief self-critique, including comments about the process, revisions, and rational for choices and changes. 4.4

Art criticism receives a great deal of attention in this class. It is one of the ways student learn. They develop a strong visual arts vocabulary, enabling them to be articulate when discussing art. 4.5

Connections, Relationships, and Applications

Students will create an advertisement for a school event or production that includes illustrated versions of performers, characters, and sets. Animations will become flyers with dynamic movement, which could potentially serve as an e-mail, or web-based marketing tool. 5.1

Students will create an animation interpreting words found in literature or spoken words from a historical figure that have a cross cultural or universal message. This animation will visually articulate what the written or spoken words mean to the students. 5.2

Students will explore, compare, and contrast ways in which different media cover the same art exhibit. Written work will be posted on the class Blog. 5.3

Students learn about careers of writers, directors, traditional artists, storyboard artists, character designers, animators, photographers, producers, design, and researchers. Additional careers in art will be described including fine artist, art critic, art historian, gallery owner, art collector, and art philosopher. The final exam will require demonstration of understanding of the various skills required, and similarities and differences, specific to various careers in animation. 5.4