# MAT 150
# ANIMATION AND INTERACTIVITY

## COURSE DESCRIPTION

Students approach web design using the latest animation and interactive media design techniques and tools. They learn to integrate animation, text, graphics, audio, and video to create rich, interactive user experiences. The course emphasizes effective interface design and design principles for time-based media.

## STUDENT LEARNING OUTCOMES

The MiraCosta faculty believe that students who complete one or more certificates or degrees are systematic, critical, creative thinkers and clear communicators who are intellectually curious, technically proficient, professional, and aesthetically literate. To that end, the faculty has identified seven Student Learning Outcomes (SLO's) that apply directly to the high-level skills you are expected to possess in the workforce: Technical Skills, Application of Discipline Skills, Critical Thinking and Problem Solving, Communication, Professional Behavior, Aesthetic Literacy and Appreciation, and Global Awareness and Responsible Citizenship.

To achieve this goal, you are expected to achieve competency in the following course-level Student Learning Outcomes, each of which help you achieve one or more of the above outcomes:

1. Conceptualize, design, and produce animations for screen output or web delivery.
2. Design and develop rich user interface and/or experiences that integrate media, animation, and interactivity.
3. Examine, analyze, and evaluate interactive media products and processes.

## COURSE OBJECTIVES

Students will learn principles and practices of animation, motion graphics, and designing for interactivity using Adobe Animate CC for multimedia applications and the web. The course will provide "hands on" experience with the tools and techniques used by designers to create effective animations, interfaces, and sophisticated interactive web and multimedia products. Students will learn to:

1. Examine, analyze, and critique interactive media products and processes
2. Assess and identify appropriate media delivery techniques for various information types
3. Conceptualize and storyboard animation sequences for screen output or Web delivery
4. Develop and produce animations for interface design and Web display
5. Create and optimize graphics, audio, and video for multimedia applications and the Web
6. Implement design principles into user interface designs
7. Develop rich user experiences, including integrating animation, text, graphics, audio, and video
8. Design for interactivity
9. Define and apply project programming techniques

Design skills, design process, personal expression, content development, project management and trends in visual communication as they relate to interactive media will be emphasized along with the learning of tools and techniques.

Software to be used in the class includes: Animate CC, Photoshop, Media Encoder, Audacity, Dreamweaver, and others as needed. Students will explore basic programming using Actionscript and/or JavaScript.

## Video Lectures + Reading

### Video Lectures
- *Instructor created instructional videos (on the class website)*

### Recommended Reading
- *Adobe Animate CC (Classroom in a Book - 2019) by Russell Chun Digital version available for free through Safari Books Online [https://library.miracosta.edu/safari].*

### Optional Reading
- *Flash CS6: The Missing Manual by Chris Grover*
- *Learning Flash CS4 Professional: H.O.T. by Rich Shupe*
- *Learning Actionscript 3.0: A Beginner's Guide by Rich Shupe*
- *Essential Actionscript 3.0 by Colin Moock*
- *Processing: A Programming Handbook for Visual Designers and Artists by Casey Reas and Ben Fry*
- *Experience Design by Nathan Shedroff*
- *Understanding Comics: The Invisible Art by Scott McCloud*
- *MTIV: Process, Inspiration and Practice for the New Media Designer by Hillman Curtis*
- *Hillman Curtis on Creating Short Films for the Web by Hillman Curtis*
- *Cyber_Reader: Critical writings for the digital era Edited by Neil Spiller*
- *Information Arts by Steven Wilson*

The instructor can suggest other books and reference material.

## Class Materials
- USB Flash Memory Drive/Key
- A sketchbook or notebook

## Grading and Evaluation
Your final grade is based on your performance on exercises, projects, explorations (blog postings and presentation) and class participation.

### Total Possible Points = 1,000
Exercises: 300 points (30%)
Project 1: 200 points (20%)
Project 2: 200 points (20%)
Final Project: 200 points (20%)
Explorations & The Blog: 50 points (5%)
Class Participation: 50 points (5%)

## Exercises
Exercises will be assigned to provide hands-on experience with key concepts from course lectures and demonstrations. Exercises are technical and/or creative explorations that typically don't require an intensive amount of production time.

## Projects
You will conceive, design, and produce (using Animate CC) two mini-projects and one robust interactive multimedia final project that will

| Percentage | Points | Grade |
|---|---|---|
| 90 – 100% | 900 – 1000 | A |
| 80 – 89% | 800 – 899 | B |
| 70 – 79% | 700 – 799 | C |
| 60 – 69% | 600 – 699 | D |
| 00 – 59% | 0 – 599 | F |

**Grading Guidelines**

**A** – Outstanding achievement; available only for the highest accomplishment.

**B** – Praiseworthy performance; definitely above average.

**C** – Average; awarded for satisfactory performance.

**D** – Minimally passing; less than average achievement for undergraduate students.

**F** – Failing.

An incomplete grade will only be granted for extenuating circumstances.

**Lab Hours**
Computer lab hours are available to students in the Library and Information Hub. The library is generally open:
Mon – Thurs, 8 a.m. – 9:30 p.m.
Fri, 8:00 a.m. – 3:00 p.m.
Sat, 10:00 a.m. – 5:00 p.m.

**Attendance and Participation**
Your participation and engagement in the class will be considered as part of your course grade. Students are expected to attend, be on time, and be prepared for every class. The instructor has the right to drop students from the class who fail to attend. However, if you intend to drop the course, you must officially withdraw through SURF or the Admissions & Records office or risk receiving an "F" in the class.

**Due Dates**
All work is expected to be completed by the due dates. Late work may be lowered by one letter grade for each class meeting that it is late.

**Prerequisites/Advisories**
MAT 120 and considerable computer experience (and/or CSIT 100 ) are recommended.

**Classroom Rules**
All students are expected to follow the rules of the computer lab. No food or drinks are allowed in the classroom. Cell phones, iPods, and electronic devices should be turned off while in the classroom. No browsing the Internet, instant messaging, playing

require substantive production time. Each project must include imagery, animation, sound, and interactivity; you are encouraged to use text, video, and/or other media elements as appropriate to your concept.

For the final project, you will conceive and design a new interactive multimedia project around a new theme/idea of your choice or extend one of the first two projects to create a robust and refined final project. A list of possible projects and specific project requirements will be presented.

Full project details, descriptions, and requirements will be available online at http://karlcleveland.com/150.

Project grades are based on the quality of your work in the following areas: content/concept, form, function, and technique. For information on the specific grading considerations related to each of these areas, see http://karlcleveland.com/150/grading.htm.

## EXPLORATIONS & THE BLOG

In this class you will survey, research, and explore compelling and cutting-edge examples of interactive media art and design, the studios and artists involved in the production of such work, and other issues related to the design of interactive multimedia products and/or experiences. A collaborative class blog will provide an opportunity to share and discuss your findings. Your research will focus on two of four possible areas of exploration:

1) *Studio/Artist Exploration:* An in-depth look into a design studio or individual multimedia artist and their work.
2) *Design Exploration:* An in-depth exploration of interactive media design and animation, reviewing design principles/techniques and how they operate and/or are put into action to create effective interactive multimedia products or experiences.
3) *New Media Exploration*: An exploration of issues and practices related to interactive media arts, such as technology use; creative, developmental and business processes; and critical/theoretical analysis.
4) *Resources Exploration:* An exploration of resources available online (such as tools, stock media assets, articles, instructional tutorials, and/or sites of inspiration) that are of value to the Flash designer or developer.

Your research will culminate in two blog postings to the class blog and one oral presentation/demonstration of your findings to the class.

computer games, or writing e-mail during active classroom time.

### Conduct
All students are expected to follow the administrative rules and standards of conduct detailed in the college catalog. Students are expected to be respectful and professional in their interactions with the instructor and other students in the class. Students are expected to produce original work and not use pre-packed templates, designs, or code. Plagiarism may result in a failing grade and other consequences. A student may not use or copy by any means another's work (or portions of it) and represent it as his/her own. Quotations, photographs, or other artwork used by a student should be given appropriate credit or reference.

### Tutoring and College Support Services
Student support services are available including tutoring, health services and personal counseling, academic and career counseling, veterans' services, and more. See the student services website for links and phone numbers to the wide variety of student services available to you.

### Disability Accommodations
Students with a disability may be entitled to appropriate accommodations and are encouraged to contact the instructor and the Disabled Students Programs & Services (DSPS) office at 795-6658.

### LGBTQIA+ Resources
MiraCosta College has an expressed commitment to equity and inclusion for students, faculty, and staff who are lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual. For information about LGBTQIA+ campus resources and services, visit: miracosta.edu/lgbt.

### Administrative Dates
2/2 is the "Add" and "Drop" deadline (without a "W" recorded). 2/21 is the "Pass/No Pass" option deadline. 4/24 is the "Withdraw" deadline (with a "W").