# COURSE SYLLABUS

**Course Title:** Computer Animation  
**Department:** Art  
**Curriculum:** Graphic Design  
**Date submitted:** Spring 2014 (AAC: 14-23)

## Course Code: GRA*270

### Course Type:
- Z: Design Principles (GRA*101), Introduction to Computer Graphics (GRA*110), and Visual Communications (GRA*200)

### Elective Type:
- FA/G/LAS

## Course Descriptors:
Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

### Prerequisites:
- Design Principles (GRA*101), Introduction to Computer Graphics (GRA*110), and Visual Communications (GRA*200)

### Corequisites:
None

### Other Requirements:
None

## Ability Based Education (ABE) Statement
At Tunxis Community College students are assessed on the knowledge and skills they have learned. The faculty identified the General Education Abilities critical to students' success in their professional and personal lives. In every class, students are assessed on course abilities, sometimes program abilities, and, in most classes, at least one General Education Ability. Students will receive an evaluation of the degree to which they have demonstrated or not demonstrated that General Education Ability.

## Catalog Course Description:
An introduction to the concepts and techniques in the creation and production of traditional and computer-based 2D animation using Macromedia Flash. The course will cover the kinds of animation, basics of animation theory, script and storyboard development, character and scene design, motion and movement, cells and computer generation of animated sequences.

## Topical Outline:
List course content in outline format.

### Kinds of animation
1. Flip books
2. 2D traditional cell (“Disney”)
3. 2D computer
4. 3D computer
5. Stop action

**The animation team**

**Animation concepts**
1. The narrative
2. Sequencing
3. Continuity
4. Characters
5. Background
6. Movement
7. Transformation
8. Keyframe
9. In-betweens

**Pre-production**
1. Concept
2. Script
3. Format
4. Visual concept
5. Characters
6. Scenes/Background
7. Storyboard
8. Planning and production timeline
9. Budget and resource consideration

**Production process**
1. Traditional/Computer
2. Cells
3. Keyframes
4. In-betweens
5. Transitions
6. Camera movements
7. Motion paths
8. Pencil/motion test
9. Image rendering
10. Global/local actions
11. Color table animation
12. Score/exposure sheet
13. Eases – acceleration/deceleration/kinematics

**Macromedia Flash**
1. Techniques used in Macromedia Flash to create animated pieces

**Post production**
1. Editing
2. Distribution and output options
   - film
   - disk
   - video
   - CD ROM
Outcomes:
Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.

Upon successful completion of this course, the student will be able to do the following:

**COURSE:**
1. develop concept and script
2. develop a flow chart and storyboard
3. design images and background
4. apply movement (animation)
5. apply technical skills necessary to produce animation in required format/media
6. understand the concepts, requirements and possibilities of tractional and computer animation through analysis and critique of existing animated pieces.
7. learn the working relationship between members of an animation design and production team through discussion and review of project examples and identifying the contributions made by the members of the team
8. design and create original animated pieces to learn and apply the process of animation project development from concept, to script, through storyboard, to creation and production
9. use “flip book” animation to apply and demonstrate the creative and technical processes of traditional animation through the design and creation of a flipbook animation project
10. use 2D animation software – Macromedia Director – to apply and demonstrate the creative and technical processes of 2D computer animation through the design and creation of a computer animation project
11. communicate visual concepts through the appropriate choice and application of images, backgrounds, and movement
12. think critically and effectively communicate an understanding and application of design and technical concepts through participation in class and individual discussions
13. work with the demands of deadline pressure through the strict adherence to project schedules
14. present a portfolio of work showing evidence and understanding of the concepts and techniques presented during the course.

**PROGRAM:** (Numbering reflects Program Outcomes as they appear in the college catalog)

**GENERAL EDUCATION:** (Numbering reflects General Education Outcomes as they appear in the college catalog)

1. **Aesthetic Dimensions** - Students will understand the diverse nature, meanings, and functions of creative endeavors through the study and practice of literature, music, the theatrical and visual arts, and related forms of expression.
   - **Demonstrates:** Identifies and describes formal aspects, historical or cultural context, and aesthetic elements of the genre with clarity and appropriate vocabulary.
   - **Does Not Demonstrate:** Unable to clearly identify and describe the formal aspects, historical context, and aesthetic elements of the genre.
### Evaluation

List how the above outcomes will be assessed.

- Instructor’s observation of studio classwork
- Projects
- Individual and group critiques/discussions
- Portfolio review or work completed during the semester
- Option of quizzes/exams/papers/reports/presentations/or other evaluation method(s) determined by the instructor

### Instructional Resources

List library (e.g. books, journals, online resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.

#### Required:
- Graphic Design studio
  1. 20 student Macintosh computer workstations with 128MB RAM/ZIP/4-6 GB HD/15” color monitor/digitizing tablets/keyboard/mouse with current version of Macintosh OS and required utility software
  2. 4+ scanning and color output workstations
  3. Instructor workstation with permanently attached color projection system
  4. Computer network (ethernet 10BaseT min.) with file server setup for student and instructor storage, and print spooling
  5. 2 to 3 color flatbed scanners, color slide scanner, and appropriate scanning software
  6. Software used in the course – Adobe Illustrator, Adobe Photoshop, Macromedia Dreamweaver (current versions)
  7. Internet access to view online animation examples using Netscape Communicator and Microsoft Explorer (current versions)
  8. CD-R/W drive to store and distribute finished animations
  9. Letter and tabloid size black & white, and color Postscript laser printers
  10. Permanently mounted 35mm slide projector
  11. Paper cutters
  Light tables

#### Desired:

#### Textbook(s)