2-D ART FOR GAMES MINOR REQUIREMENTS (24-26 UNITS)

This interdisciplinary minor integrates three major disciplines (fine arts, computer science and interactive media) to develop the 2-D visual skills necessary to conceptualize and illustrate images for games. Skills include figure drawing, perspective, camera angles, point of view, story boarding, character development, and illustration techniques. Software programs such as Illustrator, InDesign, and Flash will be utilized in basic interface and interactive design assignments. Although game genres include 3-D examples, this minor will focus on the 2-D graphics for 2-D games and 3-D interface design. The minor includes fine arts courses, as well as game design, game technology, production pipelines and play testing courses in computer science, and interactive media.

16 units must be unique to the minor and outside of your home department.
Successful completion of the following courses with a minimum of straight “C.”

Students interested in this minor are required to:
1) Have a declared major, and complete a minimum of 32 units of college-level courses with an overall GPA of 2.75 or higher.
2) One course in progress or completed towards the minor prior to submitting an application.
3) Submit an application to the Roski Student Affairs Office. Applications are available in HSH 101 or online at http://roski.usc.edu/undergrad/minors/info.html

Required Lower-Division Courses (8 units):

**FADN 102: Design Fundamentals (4 units)**
This course is an introduction to the basic elements and processes of visual communication. Coursework will explore design elements and vocabulary for critical purposes, through exercises that improve visual and manual dexterity.

**FADW 101: Introduction to Drawing: Studio Projects, Methods, and Materials (4 units)**
This course teaches you how to draw—how to render spatial relationships, light, texture, and forms. It will develop your ability to see and transpose what you see onto a two-dimensional drawing surface. Topics covered in class include rendering objects and light, drawing materials, the illusion of space, an introduction to figure drawing, expressive qualities, and serial drawing.

Required Upper-Division Courses (12-14 units):

**CTIN 488: Game Design Workshop (4 units) Recommended Preparation: CTIN 190 and CTIN 483.**
Theory and evaluation of interactive game experiences and principles of game design utilizing the leading software approaches and related technologies.

**CSCI 491abL: Final Game Project (4 units-a, 2 units-b) * May take both 491a and b for credit – 6 units total. Must take a before taking b.**
Design, iterative prototyping, and development of a 1st playable level.

OR

**CTIN 491L: Advanced Game Project I (4, max 8 units) Recommended Preparation: CTIN 483, CTIN 484, CTIN 486, CTIN 488, and CTIN 489. * Can be taken as elective if not taken as upper-division requirement. May take it up to 2 times for credit – 8 units total.**
Students work in teams on pre-production and prototyping of a functional digital game suitable for distribution via the web and/or submission into independent games festivals.

**FASC 436: Art and Technology (4 units)**
The emphasis of this class is conceptual thinking, directed research, and personal investigation in the development of individual project proposals that investigate three-dimensional video capture and graphic production. Focus is on the appropriate stereoscopic or 3-D graphic technology in the communication of student projects.

Elective(s) (4 units) chosen from the following:

**CSCI 281: Pipelines for Games and Interactives (3 units)**
The course explores the aesthetic development/technical implementation necessary to achieve unique, compelling, intuitive visual design in games. Students will develop group visual game design portfolios.

**CTAN 330: Animation Fundamentals (2 units)**
This course is an introduction to the fundamentals of animation, covering such topics as timing, anticipation, reaction, overlapping action, and metamorphosis.

**CTAN 451: History of Animation (2 units)**
In-depth survey of historical developments, styles, techniques, theory and criticism of animation as an art form.
CTAN 452: Introduction to 3-D Computer Animation (2, max 4 units) * May take it up to 2 times for credit – 4 units total.
Lecture and laboratory in computer animation: geometric modeling, motion specification, lighting, texture mapping, rendering, compositing, production techniques, systems for computer-synthesized animation.

CTIN 484L: Intermediate Game Development (2 units) Prerequisite: CTIN 483, CTIN 488 or CTIN 489 * Must take it concurrently with CTIN 489.
Advanced topics in game programming and implementation such as using game engines, creating digital prototypes, player controls and level design.

CTIN 489: Intermediate Game Design Workshop (2 units) Prerequisite: CTIN 483, CTIN 488 or CTIN 541 * Must take it concurrently with CTIN 484L.
A follow-up to the introductory game design class, this course will introduce more advanced concepts in game design and game theories, including ideation, digital prototyping and level design.

FACS 150: Visual Culture and Literacy I (4 units)
The course examines major developments in modern and postmodern visual culture. Beginning with the late 19th century, the course will look closely at different modes of cultural production – including art, film, and design.

This course provides design students with the most commonly used software tools (e.g., Adobe Illustrator, Adobe InDesign). Students will learn the programs through a series of lectures, exercises, and projects emphasizing visual problem solving.

FADW 201: Intermediate Drawing (4 units) Prerequisite: FADW 101
Students will learn about drawing methods and concepts, with emphasis on observing and rendering the human form and anatomy. They will continue to acquire skills, with compositional, gestural, and interpretive elements.

FADW 301: Advanced Drawing (4 Units) Prerequisite: FADW 201
The course endeavors to give breadth and extension to a definition of drawing. Class objectives include: to question the nature and development of each student's conceptual and perceptual processes relative to drawing; to continue to identify and develop skills and perception relative to personal imagery; to explore changes in attitude about historical drawing; and to investigate new directions of individual expression.

FAIN 210: Introduction to Digital Photography (4 units)
This introductory class will acquaint students with the computer, the digital camera, Adobe Photoshop, and digital printing from a fine arts standpoint. Theoretical lessons will establish a strong platform for progress and experimentation.

FAPT 105: Painting I (4 units)
This course teaches you how to paint with oils, emphasizing both the mastery of skills and also an understanding of the conceptual basis behind painting. We cover the basics of color theory and composition, paint mixing, medium, and clean up.

ITP 280: Video Game Production (4 units)
History of video games; overview of game genres; phases of video game development (concept, preproduction, production, post-production); roles of artists, programmers, designers, and producers.

2-D Art for Games Minor Sample Course Sequence
* This is one way to fit all the requirements into three semesters.

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