

# Catalog Erratum

The following changes and additions to  
October 1, 2010 Catalog Addendum  
are effective as of April 1, 2011

## Advertising Design – Bachelor of Fine Arts

GD212 Digital Photography for Designers replaces PHOT101 Principles of Photography

Mathematics and Science Elective (choose two, 8.0)

### **NEW PROGRAM**

#### **Game Art & Design**

#### **Bachelor of Fine Arts**

*Effective April 1, 2011*

The process of designing and producing digital games and other types of interactive multimedia involves a variety of specialized skills. Some of these skills are conceptual: designing game concepts and interactions or creating stories. Some of these skills are artistic: drawing and sketching, creating 3D models, 3D animation, and texture mapping for 3D, using industry standard software; photo manipulation and original creation of 2D art for backgrounds, and characters, and props using imaging software. Some of these skills are managerial: determining budgets and schedules for project completion and assembling the right group of creative people. Game artists may be specialists in one or two aspects of the total game development process, but their value as participants in that process is enhanced by a comprehensive knowledge of the entire operation.

In pursuing the bachelor's degree in Game Art & Design, students are encouraged to master traditional skills through a rich variety of fundamental art courses while learning to use 2D and 3D design tools to create characters, backgrounds, animations, and textures used in producing digital games and related interactive media. In addition, they acquire a level of awareness and knowledge of the terminology used in programming and scripting to be able to converse intelligently with programmers. The bachelor's degree program also provides a unique learning opportunity in the management of projects and game development teams. Anticipated assignments and projects include designing gameplay and back stories; creating characters and related environments; employing 3D modeling and animation software to create game art; employing 2D image software to create backgrounds and 3D textures; and applying knowledge of games to evaluate game products.

### **Mission Statement**

The Bachelor of Fine Arts in Game Art & Design prepares graduates for careers in the game and other industries as 2D and 3D artists, texture mappers, and project managers. With experience and advancement some graduates may become game and level designers. Graduates will work as members of development teams to produce digital games, interactive entertainment, and educational and training software products.

### **Career Opportunities**

The following career opportunities are identified for the Game Art & Design Bachelor of Fine Arts degree: 2D Artist, Illustrator, Real Time 3D Modeler, Interactive Scriptwriter, 3D Modeler, 3D Animator/Character Animator, Special Effects Artist, Background Artist, Level Designer, Production Assistant, Quality Assurance/Bug Tester, Texture Mapper, 2D Animator, Interface Designer/Developer, Game Reviewer.

## **PROGRAM CURRICULUM**

### **Game Art & Design,**

### **Bachelor of Fine Arts**

*180 credits*

#### Program Courses

GAD100	Introduction to Game Development (3.0)
GAD110	Interactive Story Telling (3.0)
GAD130	Game Design and Game Play (3.0)
GAD235	Texture mapping for Games (3.0)
GAD240	Material and Lighting (3.0)
GAD255	Interior Spaces and Worlds (3.0)
GAD275	Character and Game Modeling (3.0)
GAD300	Level Design (3.0)
GAD310	Lighting and Texture (3.0)
GAD315	Programming for Artists (3.0)
GAD320	Advanced Level Design (3.0)
GAD325	Game Prototyping (3.0)
GAD330	Project Management for Game Art and Design (3.0)
GAD335	Sound Design for Games (3.0)
GAD340	Advanced Game Prototyping (3.0)
GAD345	Interface Design (3.0)
GAD350	Game Animation (3.0)
GAD400	Team Production Planning (3.0)
GAD405	Advanced 3-D Animation (3.0)
GAD410	Team Production I (3.0)
GAD415	3D Scripting (3.0)
GAD425	Portfolio I (3.0)
GAD420	Team Production II (3.0)
GAD430	Portfolio II (3.0)
CA115	Drawing and Anatomy (3.0)
CA120	Storyboarding (3.0)
CA215	2D Animation Principles (3.0)
CA230	3D Modeling (3.0)
CA233	Life Drawing and Gesture (3.0)
CA251	Character and Object Design (3.0)
CA265	3D Animation (3.0)
CA270	Hard Surface and Organic Modeling (3.0)
CA260	Background Design and Layout (3.0)
CA343	3D Character Rigging (3.0)
GD101	Digital Illustration (3.0)
	<i>Elective (3.0)</i>

#### Foundational Courses

ART106	Design Fundamentals (3.0)
ART108	Observational Drawing (3.0)
ART109	Image Manipulation (3.0)
ART114	Color Fundamentals (3.0)
ART111	Perspective Drawing (3.0)
CO101	College 101 (2.0)
RS001	Introduction to the Career Portfolio (0.0)
CD400	Career Development (3.0)
RS002	Completion of the Career Portfolio (0.0)
CS104	Computer Applications (1.0)
INT419	Internship (3.0)

#### General Education Courses

ENGL1301	English Composition (4.0)
MATH1314	College Algebra (4.0)
ARTS1303	Art History I (4.0)
ARTS1304	Art History II (4.0)

PHYS1301 Physics (4.0)  
 SPCH1315 Public Speaking (4.0)  
 PSYC2301 General Psychology (4.0)  
 SOCI1306 Social Problems (4.0)  
*Social Science Elective (choose one, 4.0):*  
 PSYC2319 Social Psychology  
 PSYC3019 Human Sexuality  
*English Humanities Elective (choose one, 4.0):*  
 ENGL1302 Introduction to Literature  
 ENGL2307 Creative Writing  
 ENGL2311 Business Writing for Professionals  
 ENGL3511 Literature & Film Analysis History  
*History Humanities Elective (choose one, 4.0):*  
 HIST1301 U.S. History I  
 HIST1302 U.S. History II  
 HIST2321 World Civilizations I  
 HIST2322 World Civilizations II  
*Mathematics and Science Elective (choose one, 4.0):*  
 BIOL1308 Biology  
 ENVR1401 Environmental Science  
 MATH4332 Mathematics for Decision Making

### **Game Art & Design Course Descriptions:**

#### **GAD100 Introduction to Game Development**

This course introduces students to the game industries. It will focus on entry-level employment opportunities and responsibilities, career paths, industry products, and their characteristics. The course will also expose students to the processes through which games are developed.

#### **GAD110 Interactive Story Telling**

This course will focus on the aspects of interactive and multi-threaded storytelling. Narrative scripting techniques will also be taught. Scripts will be developed with an emphasis on characterization, plotting, target audience, messages and script format.

#### **GAD130 Game Design and Game Play**

A well-designed game is an integration of artistic and technological components that must have a clearly defined goal, set of game criteria and rules for game play. Students learn the fundamentals of what makes a game enjoyable, playable, challenging, and marketable by creating a game document.

#### **GAD235 Texture Mapping for Games**

In this class students will be introduced to the process of creating and working with textures for the game genre. Advanced image manipulation techniques will be learned and applied here. Introduction to a shading network as it applies in a 3D Software package will be explored.

#### **GAD240 Material and Lighting**

In this class students will be introduced to materials, textures and lighting strategies to add detail and realism to objects without adding complexity to the model. Students will simulate real world surfaces and textures.

#### **GAD255 Interior Spaces and Worlds**

Most levels of popular games are designed as building interiors and contain characteristics common to interior design layouts. This course

provides the opportunity for students to create architectural interiors representing houses, buildings, and entire worlds in which to place animation and game characters.

#### **GAD275 Character and Game Modeling**

Real time 3D animation requires a thorough understanding and ability to create scenes and characters in such a way as to minimize the time it takes for a computer to redraw the scene as it moves in a game. Students will learn level detail creation techniques using industry-standard 3D modeling software and computers.

#### **GAD300 Level Design**

Using learned concepts from the game design and game play course, students analyze and extract level design needs. Students begin the process of determining the basic design elements and assets necessary to create a level.

#### **GAD310 Lighting and Texture**

In this course, students will continue to develop lighting and texturing skills for Game Art & Design and carry out professional quality lighting and texturing projects to be used for their portfolio.

#### **GAD315 Programming for Artists**

This course introduces basic scripting to extend the capabilities of the artist working in media applications. Students will be introduced to data structures, constructs, classes, and high level scripting languages. A functional application relating to their field of study will be produced utilizing a scripting language.

#### **GAD320 Advanced Level Design**

Create playable levels using an industry standard level editor and tools. Emphasis is on implementation of the design and assets. Building on abilities gained in the Level Design course, students will create more intricate design elements.

#### **GAD325 Game Prototyping**

In this course, students will perform as members of a pre-determined team to create a game level within an existing engine. Students will implement a pre-existing design determined by the teacher to create the game environment.

#### **GAD330 Project Management for Game Art & Design**

A specialized project management course for Game Art & Design. Students learn to organize personnel, equipment, and a variety of other media assets for production purposes. Emphasis is placed upon skills and techniques for goal-setting, strategic planning, organization, communication, risk management, efficiency, and cost effectiveness. Legal aspects of the game production business are also covered.

#### **GAD335 Sound Design for Games**

In this course the student studies sound characteristics of digital games and explores the various methods for creating and adapting audio effects. Basic principles of acoustics, voice recording, music selection and editing and digital audio processes will be covered. Various sound design techniques within a gaming context and principles of audio fidelity, format conversion, and compression will be introduced. The student will create and assemble audio assets for a targeted project.

### **GAD340 Advanced Game Prototyping**

In this course, students will perform as members of a pre-determined team to create a game level within an existing engine. Students will continue to develop a project that began in the Game Prototyping class by a different team of students. Final will be complete delivery of project through a presentation and use of marketing materials.

### **GAD345 Interface Design**

This course focuses on the nature and principles of interface design. Students will learn the functions of flowcharting, linking, branching and the basic principles of interactivities between action and response. Students will develop a concept, produce a flowchart, and complete the design of an interface using principles of design aesthetics and usability.

### **GAD350 Game Animation**

This class explores game specific animation and how it is applied in real-time environments. It looks at creative solutions to handling constraints unique to individual game engines.

### **GAD400 Team Production Planning**

During the course, students research a Game Art & Design topic and begin the preproduction process for their team projects. The emphasis is on quantitative and qualitative research, scheduling of the project, methods of presentation, and qualitative results.

### **GAD405 Advanced 3D Animation**

This course is the culmination of all modeling and animation courses. Students will create work based on understanding of modeling, animation and rigging.

### **GAD410 Team Production I**

This course will build upon the Team Project Plan course. Students will either select or accept a specific role on the production team and, acting in a timely and professional capacity, ensure that the game project is completed. Students will create and refine the game production document, level designs, basic 2D art and 3D models to be combined into a playable Game Demo in Production Team II.

### **GAD415 3D Scripting**

This course applies scripting skills to a 3D engine in order to extend the capabilities of the artist in creating a prototype game or demonstration. Students will implement scripts to incorporate interface elements, alter in-game assets, and manipulate the in-game camera.

### **GAD420 Team Production II**

This is a team production course. Under the guidance of an instructor, students will continue to work in teams and complete the game project started in Team Production I.

### **GAD425 Portfolio I**

This course will focus on the refinement of previous work into a comprehensive collection representative of Game Art & Design skills. Emphasis will be on development, design, craftsmanship and presentation. This course begins the process of examining the student's strengths and building upon them to produce a marketable portfolio.

### **GAD430 Portfolio II**

This course focuses on the completion of a student's portfolio and enables the student to begin their career search. Students will present work for the portfolio and will review and determine the quality of the work and make any enhancements necessary. The student will also complete several targeted, professional resumes and an extensive job search.