

COURSE IMPLEMENTATION DATE: September 2007
COURSE REVISED IMPLEMENTATION DATE:
COURSE TO BE REVIEWED: May 2011
(Four years after UPAC final approval date) (MONTH YEAR)

OFFICIAL COURSE OUTLINE INFORMATION

Students are advised to keep course outlines in personal files for future use.
Shaded headings are subject to change at the discretion of the department and the material will vary
- see course syllabus available from instructor

FACULTY/DEPARTMENT: _____		
GD 332		3
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS
	Virtual Space Design	
COURSE DESCRIPTIVE TITLE		

CALENDAR DESCRIPTION:

In this advanced course students learn how to think in 3D and how to design and model for a 3D environment. Students learn how to simulate multidimensional spatial environments by learning modeling techniques, surface, texture, and lighting animation, rendering techniques and advanced animation of 3D objects. These methods and techniques are suited for, among other applications, the web, television, film, and gaming.

PREREQUISITES: 9 credits from any of the following: CIS 104 or higher, GD 101, GD 156, GD 157, GD 203, GD 204, GD 231, GD 258

COREQUISITES:

SYNONYMOUS COURSE(S)	SERVICE COURSE TO:
(a) Replaces: _____ (Course #)	_____
(b) Cannot take: _____ for further credit. (Course #)	_____

TOTAL HOURS PER TERM: 60	TRAINING DAY-BASED INSTRUCTION
STRUCTURE OF HOURS:	LENGTH OF COURSE: _____
Lectures: 25 Hrs	HOURS PER DAY: _____
Seminar: Hrs	
Laboratory: 35 Hrs	
Field Experience: Hrs	
Student Directed Learning: Hrs	
Other (Specify): Hrs	

MAXIMUM ENROLLMENT: _____	24
EXPECTED FREQUENCY OF COURSE OFFERINGS: _____	annual
WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)	<input type="checkbox"/> Yes <input type="checkbox"/> No
TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:	<input type="checkbox"/> Yes <input type="checkbox"/> No

AUTHORIZATION SIGNATURES:

Course Designer(s): _____ A. Babiarz and J. Nolte	Chairperson: _____ BFA Curriculum Committee
Department Head: _____ J. Nolte	Dean: _____ Eric Davis
UPAC Approval in Principle Date: _____	UPAC Final Approval Date: May 25, 2007

LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:

Upon successful completion of this course students will be able to:

- Demonstrate a practical and conceptual understanding of 3D Digital design
- Simulate 3D environments for digital formats
- Demonstrate an understanding and application of advanced techniques for designing and navigating around 3D objects using different types of 3D perspectives
- Bridge the design of 3D models in both wireframe and rendered modes
- Develop complex modeling effects and animation of surfaces, textures, and lighting so as to create complex landscapes and collages
- Demonstrate an exploration of models for animation and rendering for use in various formats from television to gaming

METHODS:

Lectures, demonstrations, lab work, individual research and projects, individual and group critiques.

PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

Credit can be awarded for this course through PLAR (Please check:) Yes No

METHODS OF OBTAINING PLAR:

Portfolio and interview.

TEXTBOOKS, REFERENCES, MATERIALS:

[Textbook selection varies by instructor. An example of texts for this course might be:]

Digital 3D Design by Simon Danaher, 2004

SUPPLIES / MATERIALS:

Access to home computer and relevant software

STUDENT EVALUATION:

[An example of student evaluation for this course might be:]

Short assignments	50%
Quizzes	10%
Projects	40%

COURSE CONTENT:

[Course content varies by instructor. An example of course content might be:]

Introduction to history of 3D design and understanding 3D space

Designer's toolkit and software

Modeling: solid modeling tools, surface, subdivision, and polygon

Colour, texture, and surface styles

Lighting: using lights, light object types, lighting parameters, cameras, and using cameras

Discussion and creation of animation and the dynamics of multimedia (drawing from examples from movies, the web, animation, and gaming)

Scenes and props: types, standards, shaders, mapping standard components, enhancing materials,

Image file formats, file handling commands, and utilities

Advanced techniques: revolving, rotating, environment maps, and depth of field