COURSE NUMBER/TITLE: GDD-325 Two Dimensional Game Design & Development

CREDITS: 4

COURSE DESCRIPTION: Hands on experience designing video games. Students design and develop two-dimensional games from concept to completion in teams. The production environment will reflect the approach used in the game development industry. Prerequisites: CS-244 Data Structures or DES-220 Introduction to 2D Digital Imaging

TEXTBOOK: Foundation Game Design with HTML 5 & Java Scripts, 1st Ed., by van der Spuy (adopted Spring 2014)

Previous:
Foundation Game Design with Flash, 1st Ed., by van der Spuy (adopted S10)

COURSE OBJECTIVES:
Upon successful completion of the course, the student will be able to:
1. Demonstrate basic understanding of the entire game design and development process.
2. Conceptualize and realize a complete 2D game title.
3. Apply fundamental game design, visual art, narrative development and programming concepts in the development of an original 2D game.
4. Understand and articulate the many roles that must work synergistically towards developing an original 2D game.
5. Articulate the range of potential art assets needed to design and develop an original 2D game.
6. Articulate the range of potential programming assets needed to design and develop an original 2D game.
7. Develop documentation for all art and programming components necessary for the development of a successful 2D game.

COURSE OUTLINE:
1. Game Design & Development Concepts/Skills (Objective 2)
   a. Game Design Theory
   b. Research a Game Idea
2. Game Platform Requirements (Objective 2)
   a. PC-based Games
   b. Web-based Games
   c. Handheld Device Games
   d. 2D vs. 3D
3. Game Industry Roles (Objectives 1, 4)
   a. Company Roles
      i. Developer
      ii. Publisher
      iii. Manufacturer
   b. Development Team Roles
i. Visual Design  
ii. Programming Design  
iii. Audio Design  

4. Game Development Process (Objectives 1, 5, 6, 7)  
a. Asset Production  
   i. Visual Design  
   ii. Programming  
b. Game documentation  
c. Management  
d. Marketing  

5. Game Development Project (Objectives 3, 5, 6, 7)  
a. Process Development  
b. Concept Development  
c. Project Scope  
d. Visual Design  
e. Game Play Design  
f. Technical Design  
g. Functional Specification  
h. Tools Design  
i. Documentation