



## BAKER COLLEGE STUDENT LEARNING OUTCOMES

GSD4320 Unity Game Programming II  
3 Credit Hours

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### Student Learning Outcomes and Enabling Objectives

1. Design a computer game using the Unity 3D game engine processes
  - a. Setup lights in a scene.
  - b. Manage assets/objects in you game.
  - c. Examine Game Controller.
  - d. Setup of environmental game play objects.
  - e. Setup the Player (Animation, Movement, Stats).
  - f. Construction of enemy players.
  - g. Explore procedural generated game elements.
  - h. Evaluate the use of the physics engine in your game design.
  - i. Determine the appropriate use of movement in your game design.
  - j. Add elements to your game design.
  - k. Explore Artificial Intelligence.
2. Create a functional 3D computer game by combining design and programming for the Unity 3D game engine
  - a. Use scripting to help program a 3D computer game
  - b. Add game details using the animation editor

### Big Ideas and Essential Questions

#### Big Ideas

Game engine processes

- Start to finish game building.
- Interactive Game Elements.
- Artificial Intelligence.
- Controls in the Game
- Lighting a Scene and Objects.

Game engine programming

- Scripting

- Best practices

### **Essential Questions**

1. How do I use the game engine processes to build a game?
2. How does the type of game determine the programming needed to work within the game engine?

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These SLOs are not approved for experiential credit.

**Effective: Fall 2022**