

Attn: Computer Science and Informatics Students

Game Programming and Design

Fall **2017**



CSCI-B 583 CSCI-C 490 INFO-I 400

Instructor: Dr. Dana Vrajitoru (dvrajito@iusb.edu)

Prereq: CSCI-C 243 INFO-I 308 or CSCI-A 594. **Recommended:** CSCI-C 481 or B 581 **When:** Monday & Wednesday 5:30-6:45pm

Course Objectives:

Upon successful completion of this class, students should be able to:

- ◇ Illustrate an understanding of the concepts behind game programming techniques.
- ◇ Write clear and efficient code relevant to professional game development.
- ◇ Be able to identify game genres, goals, and rules, and effectively apply them to design the game play.
- ◇ Be able to connect elements of interface, images, sounds, and code into a well functioning application using a game engine.

Programming and Design environment:

Unity Game Engine, C#, Visual Studio or Xcode, Blender

Topics: Learning the Unity game engine, sprites, collision detection, 3D environments, game genres, rules, and goals, MDA (mechanics, dynamics, aesthetics), interfaces, and animation.

If you are self-motivated, hard-working, and want to learn more about how to design and develop games, this is the right course for you!