

## 2022 SI@UCF Python and PyGame Course A Syllabus

**Course Description:** This course will teach the basics of Python and the package PyGame, including basic input and output, use of variables, if statements, math functions, loops, the Python Turtle, functions, strings, lists, dictionaries, game design principles, graphics, animations, images and sounds.

**Course Web Page:** <http://www.cs.ucf.edu/~dmarino/ucf/bhcsi/2022/introA/>

**Grading:** There are 8 daily homework assignments (individual), each worth 5%. Overall class participation will be worth 20% total. The final project (in pairs) itself is worth the remainder of the course grade, 40%. This grade will be based on daily check points, final product and code quality.

Day	Lecture	Recitation	Assignments
6/6	Hello World, Output Intro to Turtle	Input Variables, Expressions	Counting Steps Movie Buying Gas Turtle Day 1 ( <b>due 6/6 5 pm</b> )
6/7	More Expressions, Random numbers	Turtle Shapes	Pictures Calories Road Trip Turtle Day 2 ( <b>due 6/7 5 pm</b> )
6/8	If Examples	If Statement	Lunch Card Game Spending Spree Turtle Day 3 ( <b>due 6/8 5 pm</b> )
6/9	Review, examples	For Loop	Pay Calculator For Loop Programs Turtle Day 4 ( <b>due 6/13 5 pm</b> )
6/10	Turtle using Loop	While Loop	<b>Turtle Contest</b> (due 12 pm)
6/13	Loop Control	Drawing in pyGame	Incremental Dice Collecting Coins Paint 1 ( <b>due 6/13 5 pm</b> )
6/14	Nested For Loop	Movement in pyGame	Py Game Nested Loops Bouncing Ball Edit ( <b>due 6/14 5 pm</b> )
6/15	Functions	Keyboard Input in pyGame	Balloon Pop ( <b>due 6/15 5 pm</b> )
6/16	Lists	Mouse Input in pyGame	<b>None – Field Trip</b>
6/17	Lists in pyGame	Fruit Game Example	Fruit Game Edit ( <b>due 6/17 5 pm</b> )
6/20	Final Project Intro	Sound in pyGame	Final Project
6/21	Dictionaries	Bad Mario	Final Project
6/22	More Functions	Final Project Advice	Final Project
6/23	FIEA Field Trip	FIEA Field Trip	Final Project
6/28	Class Wrap Up	Final Project	<b>Final Presentation</b>