2023 SI@UCF Python and Pygame 1 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, game design principles, designing multi-file programs, graphics, animations, images and sounds.

Course Web Page: http://www.cs.ucf.edu/~dmarino/ucf/bhcsi/2023/python1/

Grading: Homework 0 - 2%

Homework 1 to 6 - 8% each (48% total)

Turtle Contest – 10%

Final Project – 40% (2% proposal, 8% checkpoints, 20% code, 10% presentation)

Hello World, Output	т .	
	Input	Hello World
Intro to Turtle	Variables,	
	Expressions	
More Expressions,	Turtle Shapes	Counting Steps
Random numbers		Movie
		Buying Gas
		Turtle Day 1
		Due 6/6 12:30 pm
If Statement	If Examples	Pictures
		Calories
		Road Trip
		Turtle Day 2
		Due 6/7 12:30 pm
For Loop	For Loop Examples	Lunch
_		Card Game
		Spending Spree
		Turtle Day 3
		Due 6/8 12:30 pm
While Loop	Turtle Using Loop	Pay Calculator
-		For Loop Programs
		Turtle Day 4
		Due 6/9 12:30 pm
Loop Control	Drawing in pyGame	Turtle Contest
		Due 6/12 12:30 pm
Nested For Loop	Movement in pyGame	NO REQUIRED
		HOMEWORK
		IST TRIP IN AM
	Random numbers If Statement For Loop While Loop Loop Control	More Expressions, Random numbers If Statement If Examples For Loop For Loop Examples While Loop Turtle Using Loop Loop Control Drawing in pyGame

6/14	Functions	Keyboard Input in pyGame	Py Game Nested Loops Bouncing Ball Edit Due 6/14 12:30 pm
6/15	Lists	Mouse Input in pyGame	Balloon Pop Due 6/15 12:30 pm
6/16	Lists in pyGame	Sound in pyGame	Final Project Proposal Ten Balls Edit (OPTIONALS) Due 6/16 12:30 pm
6/19	Fruit Game Example	Fruit Game Split	Final Project 12:30 pm – FP Checkpoint
6/20	Split Screen Programs	Bad Mario	Final Project 12:30 pm – FP Checkpoint
6/21	TBD	TBD	Final Project 12:30 pm – FP Checkpoint
6/22	FIEA Field Trip	FIEA Field Trip	Final Project 12:30 pm – FP Checkpoint
6/23	Final Project	Final Project	Final Presentation Code Final Presentation Slides Due 6/23 12:30 pm