

## 2019 SI@UCF Introduction to Python and PyGame 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 and animations, images and sounds, sprites and collisions.

**Course Web Page:** <http://www.cs.ucf.edu/~dmarino/ucf/bhcsi/2019/intro/>

**Grading:** There are 8 daily homework assignments, each worth 4%. There are 2 tests, each worth 20%. The final project is worth the remainder of the course grade, 28%. This grade will be based on staying on task during the last week, daily check points and the quality of the final product and the style of the code.

Day	Lecture	Recitation	Assignments
6/10	Hello world, Variables, Expressions	Input, Intro to Turtle	Buying Gas Changy Money Trains Turtle Day 1 ( <b>due 6/11 12 pm</b> )
6/11	More Expressions, Random numbers, If statement	Overloading of +, Turtle Examples with variables	Pictures Debbie's Numbers Road Trip Turtle Day 2 ( <b>due 6/12 3 pm</b> )
6/12	For Loop	If Statement Examples	Pay Calculator For Loop Progs Arithmetic Game Turtle Day 3 ( <b>due 6/13 2 pm</b> )
6/13	while loop	Turtle Loop Examples	Integers Stolen Frisbee Car Payments Turtle Day 4 ( <b>due 6/13 5 pm</b> )
6/14	Loop practice	<b>Test #1</b>	<b>Turtle Contest</b> (due 5pm)
6/17	Nested loops	pyGame Introduction	XYZ Stars Paint 1 ( <b>due 6/17 5 pm</b> )
6/18	Functions	Movement in pyGame	Py Game Nested Loops Py Game Functions (House) ( <b>due 6/18 5 pm</b> )
6/19	Strings, Lists	Keyboard Input in pyGame	Bouncing Ball Edit ( <b>due 6/19 5 pm</b> )
6/20	Lists in pyGame	Mouse Input in pyGame	Final Project Proposal ( <b>due 6/20 5 pm</b> )
6/21	Dictionaries	Multifile Programs	Racketball ( <b>due 6/21 5 pm</b> )
6/24	More Functions	Sound in pyGame	Final Project
6/25	Review for Test #2	Review for Test #2	Final Project
6/26	Built in Sorting	<b>Test #2</b>	Final Project
6/27	FIEA Field Trip	FIEA Field Trip	Final Project
6/28	Final Project	Final Project	<b>Final Presentation</b>