

## 2016 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, sets, game design principles, graphics and animations, images and sounds, sprites and collisions.

**Course Web Page:** <http://www.cs.ucf.edu/~dmarino/ucf/bhcsi/2016/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, the quality of the final product and the style of the code.

Day	Lecture	Recitation	Assignments	Reading (sections)
6/13	Hello world, Variables, Expressions	Intro to Turtle	Buying Gas Changy Money Trains Turtle Day 1	Chapter 1
6/14	More Expressions, Random numbers	Overloading of +, Turtle Examples with variables	Pictures Debbie's Numbers Turtle Day 2	Chapter 1
6/15	if statement, for loop	if statement examples (Both reg, Turtle)	Pay Calculator Lemonade Turtle Day 3	Chapter 2
6/16	while loop	Turtle For Loop Examples	Stolen Frisbee Car Payments Turtle Day 4	Chapter 3
6/17	Loop practice	<b>Test #1</b>	<b>Turtle Contest</b>	Chapter 3
6/20	Nested loops	PyGame Introduction	First Game	Chapter 3 PyGame Notes
6/21	PyGame - Animation	PyGame Exercise	Racketball	PyGame Notes
6/22	Strings, Lists	Collision Detection	Asteroids	Chapter 4 Game Design Notes
6/23	Kinematics	Game Structure – Choose Final Games	Work on Game Design	PyGame Notes
6/24	Grids	UI Choices	Start Code for Game	Chapter 4
6/27	Lists for Objects	Lists for Objects	Final Project	
6/28	Review for Test #2	Project Help	Final Project	
6/29	Wrap Up	<b>Test #2</b>	Final Project	
6/30	Final Project	Final Project	Final Project	Notes
7/1	EA Sports	EA Sports	<b>Final Presentation</b>	NONE