

## 2016 SI@UCF Java/Java GUI Class Syllabus

**Course Description:** The course assumes knowledge of basic I/O, variables, if statements and loops in any programming language. A background will be given in these concepts and object-oriented design during the first week of class along with how to create graphical user interfaces in Java using Swing. The focus of the last two weeks of the course will be writing a video game in Java using Swing.

**Grading:** Homework Assignments: 32% (4% for each of 8 assignments)  
 Tests: 40% (20% for each)  
 Final Project: 28%

The number of homework assignments completed will depend on each student's pace. Once an assignment is finished, students will move on to the next assignment in the queue. Naturally, some students will finish more assignments than others, but it is expected that all students complete at least eight assignments. A tentative daily schedule is included below:

Day	Lecture	Recitation	Assignment
6/13	Java I/O, Variables, if, for, while	Java GUI - paint method	Dorm Pranks Car Payments Paint 1
6/14	Random, Math, String classes	Keyboard/Mouse Input	Math Class Practice Whack-A-Mole
6/15	User Defined Classes	GUI - Creating Motion	High Card Game Moving Box
6/16	User Defined Methods	Reflections, Collisions	Pong
6/17	Arrays of Objects	<b>Test #1</b>	Rain Simulation
6/20	Custom Sorting	Sounds	Pac-Man
6/21	2D arrays	Arrays of Objects for Games	Asteroids: Part I
6/22	2D arrays	Game Proposals	Asteroids: Part II Game Proposals
6/23	Useful Java Classes	GUI Review	Work On Game
6/24	Inheritance	Inheritance in Games	Work On Game
6/27	Recursion	Help on Project	Work On Game
6/28	Floodfill	Help on Project	Work On Game
6/29	Brute Force	<b>Test #2</b>	Work On Game
6/30	Work on Final Project	Work on Final Project	Work On Game
7/1	EA Sports Field Trip		Turn in final project