PACE-Monmouth Computer Science Syllabus for: 2014-2015
as of: 09-06-14

Fall 2014	
Date	**Topic**
6-Sep	Introductions & Class Overview
13-Sep	Introduction to Algorithms, key formulas & pseudo-code; Algorithm & pseudo-code exercises; Using Eclipse; Working with Projects, Packages & Classes in Eclipse; Hello World (basic)
20-Sep	Program structure & programming basics; introduction to variables; Start 1st assignment Using the pseudo-code worksheet; Going from pseudo-code worksheet to Java program; How to get Inputs from the keyboard; Saving & Exporting Projects
27-Sep	Overview of Variables & Types; Getting Keyboard inputs for different types; Overview of java Operators; Start 2nd assignment Using the pseudo-code worksheet,
4-Oct	Importing Projects; Work on 2nd & 3rd assignments
11-Oct	Finish 3rd assignment Introduce If … Then … Else; start 1st If Then Else assignment
18-Oct	finish 1st If Then Else project; start 2nd If Then Else (Climate Control)
25-Oct	Finish Climate Control project; introduce Problem Decomposition; Start Quadratic Equation
1-Nov	Continue Quadratic
8-Nov	No Class - College Tour
15-Nov	Finish up Quadratic
22-Nov	No Class - Engineering Trip
29-Nov	No Class - Thanksgiving
6-Dec	Review & wrap-up Fall projects and lessons

Spring 2015	
Date	**Topic**
17-Jan	No Class - late MLK Day this year
24-Jan	Introduce Looping (Rocket countdown; Climate Control with loops)
31-Jan	Looping Continued (Quadratic with Loops)
7-Feb	Introduce Case (Letter Grade --> Pass/Fail indication);
14-Feb	Introduce Spring Project (5-Star Mart); Introduce classes (menu class, store front class)
21-Feb	Continue Spring Project
28-Feb	Continue classes (start cash register class)
7-Mar	No Class - Engineering Trip
14-Mar	Introduce database concept (build menu from CSV file)
21-Mar	Finish database (build menu from CSV)
28-Mar	Wrap-up (last full teaching day)
4-Apr	No Class - Easter
11-Apr	Open House - student demos
18-Apr	No Class - Math Bowl
25-Apr	Last day of PACE - projects Showcase incl. Science Forum