School of Computing and Information Sciences

Course Title: Introduction to Computer Programming

Date: March 25, 2010

Course Number: COP 1000

Number of Credits: 03

Subject Area: Service Course	Subject Area Coordinator: Mark Weiss **email:** weiss@cis.fiu.edu
Catalog Description: Uses graphics and animation in a media programming environment to engage students with no programming experience. Students develop problem solving skills and learn fundamental programming concepts.	
Textbooks: Learning to Program with Alice, 2nd Edition - by Dann, Cooper, and Pausch, Pearson Prentice Hall, 2009.	
References: None	
Prerequisites Courses: None	
Corequisites Courses: None	

Type: Service course.

Objective: This course, which is intended for non-computing majors or dual enrollment programs, is designed to introduce programming concepts using a modern interactive tool such as Alice or Scratch, or Python with graphics libraries.

Course Outcomes:

1. Be familiar with downloading, installing, and using a programming environment.
2. Be familiar with specifying algorithms to solve real-world problems.
3. Be familiar with how algorithms can be implemented within computer programs.
4. Be familiar with the program development cycle.

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Outline

Topic	Number of Lecture Hours	Outcomes
Getting started, setting the stage, objects in 3D Space, setting the stage manually.	9	O1, O3
First Alice program, program life cycle, functions, data types and variables.	9	O2, O3, O4, O5
Object concepts applied in problem solving	9	O2, O3, O5
Control structures applied in problem solving	9	O2, O3, O6, O7

Justification

Similar courses commonly called CS-0 have been successfully taught to non-majors at dozens of universities including top schools such as Georgia Tech and Duke, and peer universities such as University of Texas El-Paso, and Texas A&M.