

**Course Title: CSC/IST 134 Introduction to Java Programming**

**Course Instructor(s): Trudy Gift**

**Programs: Computer Science, Information Systems Technology - Developer**

**Expected Learning Outcomes**

1. Analyze and explain the behavior of simple programs involving fundamental programming constructs covered
2. Design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions
3. Choose appropriate conditional and iteration constructs for a given programming task
4. Apply the techniques of structured (functional) decomposition to break a program into smaller pieces.
5. Create program code in the traditional programming style using a nongraphical user interface and in modern style programming using a graphical user interface

**Assessment (How do students demonstrate achievement of these outcomes?)**

1. Successful compilation and execution of program code
2. Satisfactory scores on exams and programs
3. Projects are graded on a rubric that meets the professional standards of developing code
4. The electronic portfolio reflects the student's acquisition of skills and learning throughout their college career. The portfolio contains a multitude of examples (i.e. communication samples, presentations, software, handouts, and input from faculty) that can be used by the student at future college/employers as evidence of their skills. Students are also encouraged to save their work from other programming classes.

**Validation (What methods are used to validate your assessment?)**

1. Faculty Review
2. Approval of Computer Science Department of a 4 year transfer university
3. Validation from IST Advisory Committee (comprised of area business people who hire our graduates).

**Results (What do the data show?)**

Students did not like the new textbook. Another one is under consideration for the Spring 2012 semester.

Students enjoyed researching the compiler (once they understood the assignment). jGrasp was the winner.

Several employers in our area are still using Visual Studio.net and are looking for students to hire in this area. This is not a feasible option for HCC to pursue at this time since we need to teach the software that will allow to move forward both in their academic and professional career.

**Follow-up** (How have you used the data to improve student learning?)

Content coverage was discussion by the students. The instructor did not start the class. The students were responsible for discussing the information and helping their classmates that did not understand. The instructor interjected topics that should be covered only if the students did not bring them up. Additional textbooks were brought to class to use as additional research. An excellent website ([java.sun.com](http://java.sun.com)) was found by a student as a resource and tutorial.

This was not a well received idea. The traditional method of teaching will be used in the Spring 2012 semester.

**Budget Justification**

(What resources are necessary to improve student learning?)

At this point, the software is a free download. There are no budget items necessary.