Course Outcomes Guide

Course/Program Title: CSC 132/IST 132 Introduction to C and C++

Date: 4/16/2013

Course/Program Team: Tom Paci-Funk

Expected Learning Outcomes:

- Design mathematical algorithms that are structured using top-down design by way of user defined functions with parameters and return values.

- Develop C++ programs incorporating input/output, control/repetition structures and manipulations with arrays.

Assessment: (How do or will students demonstrate achievement of each outcome?)

- Programming Labs – Students will complete software projects which are designed to demonstrate the use of:
  - input/output statements
  - functions with return values and parameters
  - if, while, and for-loop logic structures
  - arrays
  - file I/O
  - See the attached "Weather" program assignment with code and the "Growth" program assignment with code.

- Examinations – Students will be able to demonstrate:
  - use of the C++ programming language syntax and semantics
  - ability to read and write programs
  - See attached Midterm Exam and Final Exam.

Validation: (What methods have you used or will you use to validate your assessment?)

- IST Advisory Committee Recommendations
- ANSI coding practices

Results: (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

      See attached grade book

Follow-up: (How have you used or how will you use the data to improve student learning?)

      I see a correlation between attendance, students completing the programming assignments and students passing the exams and the course. Therefore, I need to follow up with students to make sure they are coming to class and completing the programming labs.

Budget Justification: (What resources are necessary to improve student learning?)

      PC lab hardware; projection unit, printers, PCs
      Software Development hardware and software
      Course Management software
      Classroom Management system software