Course Outcomes Guide

Course/Program Title: CSC 232/IST 232 Advanced C++ Programming

Date: 4/16/2013

Course/Program Team: Tom Paci-Funk

Expected Learning Outcomes:

- Develop C++ programs that use a variety of data structures such as arrays, 2D arrays, vectors, and queues.

- Design, code and test object oriented applications that incorporate concepts such as structures, classes and inheritance.

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:
    - Data structures such as Arrays, 2D-Arrays, Vectors, and Queues
    - OOP concepts such as structs and classes
    - Inheritance and Composition
    - Recursion
    - See the attached "Word Search" program assignment with code and the "War" 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 and Final exams.

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