Program Assessment Report

Program: Computer Science and Information Technology - Business &
Information Technology - Advanced Certificate

Year: 19/20

Division: Business and technology

Contact:

Delta College

Actions Taken in Response to Last Year's Report

No previous report. This is a new assessment activity.

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Rationale for Current Assessments

Assessment 1 of 2

Goal / Project

Outcome(s)

Construct program code based on an algorithm.

Standard / Objective

80% of students will achieve 80% score or better on defined programming activity.

Method of assessment

Course Embedded Paper(s)/Projects

Comment/Details about the method of assessment

Student programming assignments will be assessed by CST 183/283 faculty based on a pre-defined project rubric that will address the utilization of an algorithm to construct programming code.

Courses Affected

CST 183 and CST 283

Time Frame

Winter 2019

Submitted By

Don Southwell and Tim Klingler

Result

Result

(1) Results did not meet expectation/standard

Data Collection (general or specific stats regarding results)

"Students completed a final project assignment in CST 283. This project was evaluated by Tim Klingler using a standardized assessment rubric to evaluate project criteria involving the general program solution, the coding or the program, and the overall program algorithm and design. Application of the rubric led to score assignment that became the basis for the assessment evaluation.Statiscally, 75% (6 out of 8) of the

students acheived the goal of scoring ~80% or better, 25% (2 out of 8) students fell short of this goal. Scores for those acheiving the goal were 80, 94,94,100,100,100. Scores for the two students who did not acheive the goal were 0 and 57. "

What We Learned (areas for improvements, strengths, etc.)

"Given the small sample size and the rigor of the class, we feel the results are typical for students in CST 283. For the two students that fell short of the goal, one student did not submit the assignment.   The other student scored 57% because of the following deductions; a) Construct code based on an algorithm (-10%), b) Issues with program execution, validation, and testing (-12%), c) Issues with data operations (-18%)"

Use of Data to Improve Student Success

As is always the case, students will be encouraged to complete all assigned projects to avoid outliers for non-submissions. Also important, students will be reminded of importance of algorithmic development and how it contributes into successful project completion and addressing specific project deliverables. Finally, data collected from this final project assessment can be used to inform the other programming courses (e.g. CST 173, 180, 186, etc.) and support parallel objectives involving algorithm design.

Institutional Student Learning Outcome	Action plan items of what is planned based on the data and results	
☑ Apply Knowledge and Skills	☐ Change assignments/activities	☐ Update course content
☑ Think Critically	☐ Change materials provided	☐ Update course outcomes
☐ Communicate Effectively	☐ Adjust grading rubric	☑ Update prior courses
☐ Act Responsibly	☐ Continue to Monitor	☐ Other

Goal / Project

Outcome(s)

Produce programming solutions appropriate to the situation

Standard / Objective

80% of students will achieve 80% score or better on defined assessment activity.

Method of assessment

Course Embedded Paper(s)/Projects

Comment/Details about the method of assessment

Student programming assignments will be assessed by CST 183/283 faculty based on a pre-defined project rubric that will assess whether programming project(s) are designed in an appropriate manner to address a given situation.

Courses Affected

CST 183 and CST 283

Time Frame

Winter 2019

Submitted By

Don Southwell and Tim Klingler

Result

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(0) Results far below expectation/standard

Data Collection (general or specific stats regarding results)

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Discipline/Program Comments

Advisory Board Comments

Assessment Committee Comments

We should talk about assessmnts going forward because of the small numbers of students in the program. One option is to go onto a 2-year plan in which half of the program outcomes would be assessed in 2 consecutive years so as to obtain a "critical" mass of data so that changes could be recommended and implemented. The submitted report would be on those affected outcomes.
The other option would be to take data on all outcomes for all graduates every year and make a report after 4-5 years when all outcomes have been assessed.

Curriculum Council Comments

Action Plan

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Actions Taken in Response to Older Reports