

## 2022 – 23 Alternative Delivery Assessment Plan

<b>Department: Math and Computer Science</b> <b>Date: 9/26/2022</b> <b>Course: CS 131</b> <b>Alternative Format(s) – select as many as are applicable: Dual Credit      Select      Select</b>
<b>Members (must include more than course instructor only) involved with the development of this Assessment Plan: Marcus Gubanyi, Kent Einspahr</b>
<b>Course Requirements:</b> Course syllabi and credit hour calculators are collected by the Dual Credit Coordinator (Dual Credit Courses) and the respective Deans for other courses.
<b>Student Outcome:</b> 1. <i>What student outcome will be assessed? Programming Skill</i> 2. <b>State as follows: Students should be able to [action verb] [something].</b> Develop computer programs to solve problems, following programming conventions and good programming style.
<b>Question:</b> <i>What specific question(s) are you attempting to answer through assessing this student outcome? (What are you trying to find out? There may be more than one question, but no more than three.)</i> At the end of the course, are students enrolled in dual credit sections of CS 131 able to develop programs as well as traditional students?
<b>Methodology</b> 1. <b>Student Outcome - OBJECT*</b> a. <i>What student artifact from the <b>traditional course</b> will be used to assess the outcome?</i> Common Assessment Test Question on Final Exam where students write a complete program by hand. See attached. i. <i>How will the artifact be collected?</i> 10 randomly selected from Fall section b. <i>What student artifact from the <b>alternative course(s)</b> will be used to assess the outcome?</i> Same question, with dual credit instructor administering the assessment near the end of the course. i. <i>How will the artifact be collected?</i> Up to 10 per dual credit section
<b>Analysis of Artifacts:</b> 1) <b>Student Outcome: PERFORMANCE CRITERIA*</b> a. <i>How will the artifacts be analyzed (attach rubrics/scoring tools if used):</i> i. Traditional course: Scores determined with the following rubric: 4 = The program produces correct output for all inputs with minimal syntax errors and minimal deviations from acceptable programming conventions and good programming practices. 3 = The program produces correct output for nearly all inputs. The program may have some syntax/runtime errors or some deviations from acceptable programming conventions and good programming practices. 2 = The program produces incorrect output for many inputs, has many errors and/or fails to follow acceptable programming conventions and good programming practices. 1 = The student's work is far from a working program. ii. Alternative course(s) (note SAME if the same as the traditional course): SAME 2) <b>COMPARABILITY - <i>How you will determine if the outcomes of the two are comparable?</i></b> <b>(For example – there will not be a statistically significant difference among the mean final exam scores).</b> Determine statistically significant difference based on a 2 sample proportion test, using the percentage of students who score a 3 or 4.
<b>Submitted by: Marcus Gubanyi</b> <b>Date: 9/26/2022</b> <b>Assessment Committee Reviewed (Date): 10/24/22</b>
<b>Submitter notified or approval/ or additional action needed: Approved 10/24/22</b>