Computer Science (COP 2362) Assessment Report Spring 2022

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1 Introduction

Florida SouthWestern State College's Computer Science Department has embarked upon a new assessment plan beginning in the Fall 2020 term focusing on COP 2362 *C# Programming II*. The new assessment plan utilizes a brand-new rubric to measure student ability to develop code given certain scenarios. The assessment outcome goals are intended to provide a baseline achievement moving forward. Further, the study will investigate the strength and performance of items. The assessment plan also provides comparisons between dual enrollment (concurrent) and non-dual enrollment students, online versus traditional students, and by site, where possible. Where data is sufficient, additional analyses are provided including distribution studies and longitudinal studies.

For additional detail or further analysis not provided in this report, please contact Dr. Joseph F. van Gaalen, Asst. VP, IR, Assessment & Effectiveness, Academic Affairs (jfvangaalen@fsw.edu; x16965).

2 COP 2362

2.1 Descriptive Statistics and Learning Objectives

In COP 2362: C# Programming II - Assignment #1: Object Oriented Programming Black Jack Phase I will be as the assessment tool. For the Spring 2022 assessment, 10 artifacts were collected for COP 2362 from 1 of 1 course sections in this assessment. The assessment exhibits a 100% scoring 70% or higher, or 10/10 with a A, B, or C.

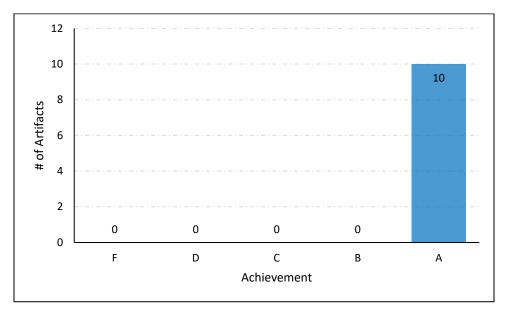


Figure 1. Score distribution for assessment.

2.2 EXPLORATORY ANALYSIS AND SIGNIFICANCE TESTING

Multiple comparisons of artifact scores across varying formats, campuses, and student types were made, where possible, to add depth to the causes of the distribution of the artifacts. Each course was divided into the appropriate subgroups to perform the analysis. In cases where a subgroup is not represented in the course comparisons were not conducted and are noted for comprehensiveness.

2.2.1 Dual Enrollment to Non-Dual Enrollment Comparison

No dual enrollment sections of the course were offered in spring 2022 so no comparison study between dual enrollment and traditional sections could be completed.

2.2.2 Modality Comparison

Only one course section was offered during spring 2022, so no comparison across modalities could be completed.

2.2.3 Comparison by Campus/Site

Only one course section was offered during spring 2022, so no comparison across sites could be completed.

2.3 LONGITUDINAL STUDY

A description of achievement over time in COP 2362 is shown below in Table 1. Results of the assessment for the Spring 2022 term compared with previous terms rank 1st, a full 11%-points above the next highest, fall 2020. See Table 1 below for details.

	N	% Scoring 70% or Higher
Fall 2020	9	89%
Spring 2021	19	84%
Fall 2021	12	75%
Spring 2022	10	100%

Table 1. Achievement over time.

3 CONCLUSIONS

Florida SouthWestern State College's Computer Science Department has embarked upon a new assessment plan beginning in the Fall 2020 term focusing on COP 2362 *C# Programming II*. The new assessment plan utilizes a brand-new rubric to measure student ability to develop code given certain scenarios. The assessment outcome goals are intended to provide a baseline achievement moving forward.

3.1 COP 2362

A drill-down of COP 2362 results are as follows:

- 1. For the Spring 2022 assessment, 10 artifacts were collected for COPT 2362 from 1 of 1 course sections in this assessment. The assessment exhibits an 100% scoring 70% or higher, or 10/10 with a A, B, or C.
- 2. No dual enrollment sections of the course were offered in spring 2022 so no comparison study between dual enrollment and traditional sections could be completed.

- 3. Only one course section was offered during spring 2022, so no comparison across modalities could be completed.
- 4. Only one course section was offered during spring 2022, so no comparison across sites could be completed.
- 5. In a longitudinal study of achievement, the Spring 2022 term compared with previous terms rank 1st, a full 11%-points above the next highest, fall 2020.