Computer Science (COP 2362) Assessment Report Fall 2021

Author: Joseph F. van Gaalen, Ph.D., Asst. VP, IR, Assessment & Effectiveness

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 Fall 2021 assessment, 12 artifacts were collected for COP 2362 from 1 of 1 course sections in this assessment. The assessment exhibits an 75% scoring 70% or higher, or 9/12 with a A, B, or C.

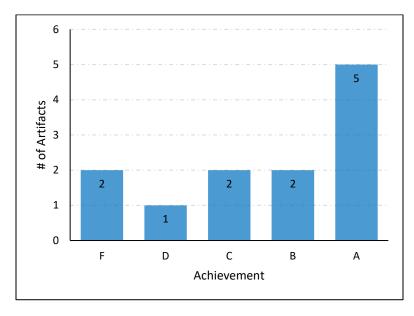


Figure 1. Score distribution for assessment.

2.2 EXPLORATORY ANALYSIS AND SIGNIFICANCE TESTING

Multiple comparisons of artifact scores across varying formats, campuses, and student types were made, where possible, in order 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 fall 2021 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 fall 2021, so no comparison across modalities could be completed.

2.2.3 Comparison by Campus/Site

Only one course section was offered during fall 2021, 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 Fall 2021 term compared with previous terms rank 3rd, a full 9%-points below the next highest, spring 2021. See Table 1 below for details.

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

Table 1. Achievement over time for CJE 1300.

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 Fall 2021 assessment, 12 artifacts were collected for COPT 2362 from 1 of 1 course sections in this assessment. The assessment exhibits an 75% scoring 70% or higher, or 9/12 with a A, B, or C.
- No dual enrollment sections of the course were offered in fall 2021 so no comparison study between dual enrollment and traditional sections could be completed.
- 3. Only one course section was offered during fall 2021, so no comparison across modalities could be completed.

- 4. Only one course section was offered during fall 2021, so no comparison across sites could be completed.
- 5. In a longitudinal study of achievement, the Fall 2021 term compared with previous terms rank 3^{rd} , a full 9%-points below the next highest, spring 2021.