

Latent Fingerprint Development Assessment Report

Fall 2017

Author: Joseph F. van Gaalen, Ph.D., Director, Assessment & Effectiveness

1 INTRODUCTION

Florida SouthWestern State College's Business Department gathers a multitude of data from various courses as assessment tools in support of the Florida Department of Education Curriculum Framework. The course included in this assessment is CJE 2671 *Latent Fingerprint Development*. The assessment outcomes are intended to provide a baseline and measurement of achievement moving forward as well as investigate the strength and performance of items in the exam. The assessment plan also provides comparisons between dual Enrollment 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, Director of Assessment & Effectiveness, Academic Affairs (jfvangaalen@fsw.edu; x16965).

2 CJE 2671

2.1 LEARNING OBJECTIVES AND DESCRIPTIVE STATISTICS

The FSW Business faculty defined one area of interest for evaluation in support of the state framework. The outcomes related to CJE 2671 are:

- CS PO 02.0 Demonstrate knowledge of collection and development of evidence.
- CS PO 03.0 Demonstrate knowledge of fingerprint development and preservation.
- CJE 2671 LO 03.01 Demonstrate knowledge of the techniques involved in the detection, enhancement, and recovery of latent fingerprints.
- CJE 2671 LO 03.02 Demonstrate appropriate application of processing techniques.
- CJE 2671 LO 03.05 Demonstrate ability to roll standard prints.

The measure of success related to CJE 2671 is:

- Outcome 1 – The total scores measured (combined total of assignments associated with Learning Outcome or Program Outcome) average '4' or higher and that 80% of artifacts score '4' or better.

During the spring 2018 semester, an enrollment of 30 contributed to scores tallied from 2 of 2 sections of CJE 2671. Descriptive statistics for achievement of outcomes are shown in Table 1. The graphical representation of mean scores is shown in Figure 1 and percentage of artifacts scoring '4' or higher is shown in Figure 2. The goal that the total scores measured (combined total of assignments associated with Learning Outcome or Program Outcome) average '4' or higher and that 80% of artifacts score '4' or

better was met. Outcome mean scores range from 4.4 to 4.9. Outcome percent scoring 80% or higher range from 94% to 99%.

<i>Outcomes</i>	<i>n</i>	<i>Mean</i>	<i>% Scoring 4 or Higher</i>
CS PO 02.0 Demonstrate knowledge of collection and development of evidence.	27	4.4	96%
CS PO 03.0 Demonstrate knowledge of fingerprint development and preservation.	554	4.9	98%
CJE 2671 LO 03.01 Demonstrate knowledge of the techniques involved in the detection, enhancement, and recovery of latent fingerprints.	220	4.9	97%
CJE 2671 LO 03.02 Demonstrate appropriate application of processing techniques.	237	4.9	99%
CJE 2671 LO 03.05 Demonstrate ability to roll standard prints.	49	4.8	94%

Table 1. Student achievement level by Outcome for CJE 2671.

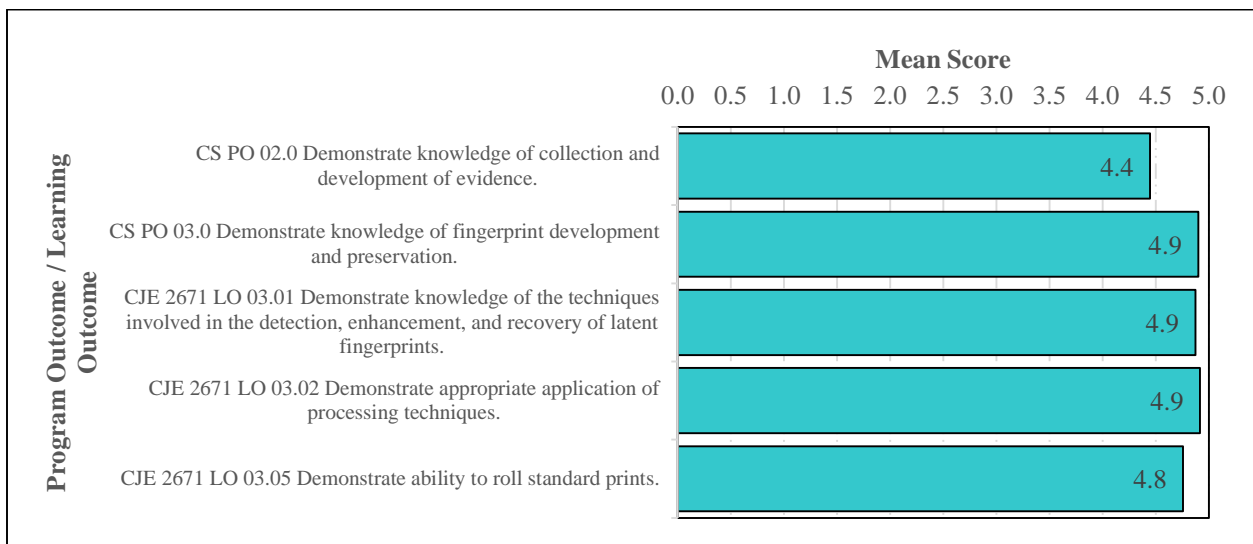


Figure 1. Bar graph of mean score by outcome for CJE 2671.

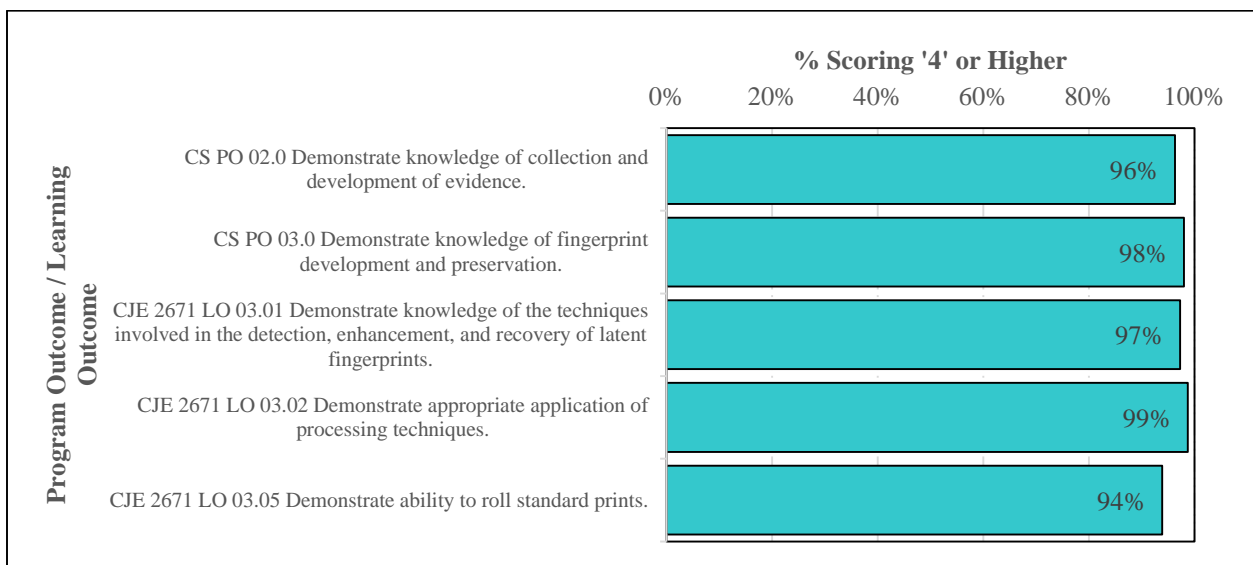


Figure 2. Bar graph of percentage of artifacts scoring '4' or higher by outcome for CJE 2671.

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 run during fall 2017 so no comparison study between dual enrollment and non-dual enrollment could be completed.

2.2.2 Online to Traditional Comparison

No online sections of the course were run during the fall 2017 semester and so no comparison of online to traditional sections could be completed.

2.2.3 Comparison by Campus/Site

Only sections from one site were run during the fall 2017 semester and so no cross-campus comparison could be completed.

2.3 LONGITUDINAL STUDY

As further data is collected in coming terms, this section will track achievement through time and highlight strengths, weaknesses and any long term trends.

3 CONCLUSIONS

FSW's Business Department gathers a multitude of data from various courses as assessment tools in support of the Florida Department of Education Curriculum Framework. The course included in this assessment is CJE 2671 *Latent Fingerprint Development*. The assessment outcomes are intended to provide a baseline and measurement of achievement moving forward as well as investigate the strength and performance of items in the exam.

3.1 CJE 2671

A drill-down of CJE 2671 results are as follows:

1. The goal that the total scores measured (combined total of assignments associated with Learning Outcome or Program Outcome) average '4' or higher and that 80% of artifacts score '4' or better was met. Outcome mean scores range from 4.4 to 4.9. Outcome percent scoring 80% or higher range from 94% to 99%.