

# Police/Criminal Investigation & Justice

## Assessment Report

### Spring 2017

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## 1 INTRODUCTION

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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 courses included in assessment are CJE 1300 *Police Organization and Administration* and CJE 2600 *Criminal Investigation Techniques*. The assessment outcomes are intended to provide a baseline and measurement of achievement moving forward. 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](mailto:jfvangaalen@fsw.edu); x16965).

## 2 CJE 1300

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### 2.1 LEARNING OBJECTIVES AND DESCRIPTIVE STATISTICS

The FSW Business faculty defined one area of interest for evaluation in support of the state framework which was clarified for the spring 2017 term. The outcomes related to CJE 1300 are:

- CJ PO 05.0 Summarize law enforcement administration.
- CJE 1300 LO 05.01 Appraise the impact of national patrol studies.
- CJE 1300 LO 05.02 Compare and contrast the various organizational structures of law enforcement agencies.
- CJE 1300 LO 05.03 Give examples of different departmental recruiting techniques.
- CJE 1300 LO 05.04 Define the general principles of allocation and deployment of patrol resources.
- CJE 1300 LO 05.05 Explain the concepts of criminal investigation management and supervision of cases.
- CJE 1300 LO 05.06 Discuss the importance of specialized units.
- CJE 1300 LO 05.07 Identify crime prevention techniques.
- CJE 1300 LO 05.08 Discuss the relevance of Special Operations to the administration of police services.
- CJE 1300 LO 05.09 Discuss the various technologies utilized by law enforcement agencies.

The measurement and objectives related to CJE 1300 are:

- 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 2017 semester, an enrollment of 35 contributed to scores tallied from 2 of 2 sections of CJE 1300. However, the online section of the course only reported PO 05.0 data. In fact, no LO outcomes were listed within any assignment for the online section of the course. 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.

<i>Outcomes</i>	<i># of Assignments Linked to Outcome</i>	<i>n</i>	<i>Mean</i>	<i>% Scoring 4 or Higher</i>
CJ PO 05.0 Summarize law enforcement administration.	29	891	4.6	92%
CJE 1300 LO 05.01 Appraise the impact of national patrol studies.	11	102	4.6	96%
CJE 1300 LO 05.02 Compare and contrast the various organizational structures of law enforcement agencies.	15	156	4.3	92%
CJE 1300 LO 05.03 Give examples of different departmental recruiting techniques.	5	48	4.4	88%
CJE 1300 LO 05.04 Define the general principles of allocation and deployment of patrol resources.	15	142	4.5	93%
CJE 1300 LO 05.05 Explain the concepts of criminal investigation management and supervision of cases.	6	56	4.5	91%
CJE 1300 LO 05.06 Discuss the importance of specialized units.	14	140	4.5	95%
CJE 1300 LO 05.07 Identify crime prevention techniques.	7	68	4.5	91%
CJE 1300 LO 05.08 Discuss the relevance of Special Operations to the administration of police services.	5	50	4.4	92%
CJE 1300 LO 05.09 Discuss the various technologies utilized by law enforcement agencies.	7	70	4.3	90%

Table 1. Student achievement level by Outcome for CJE 1300.

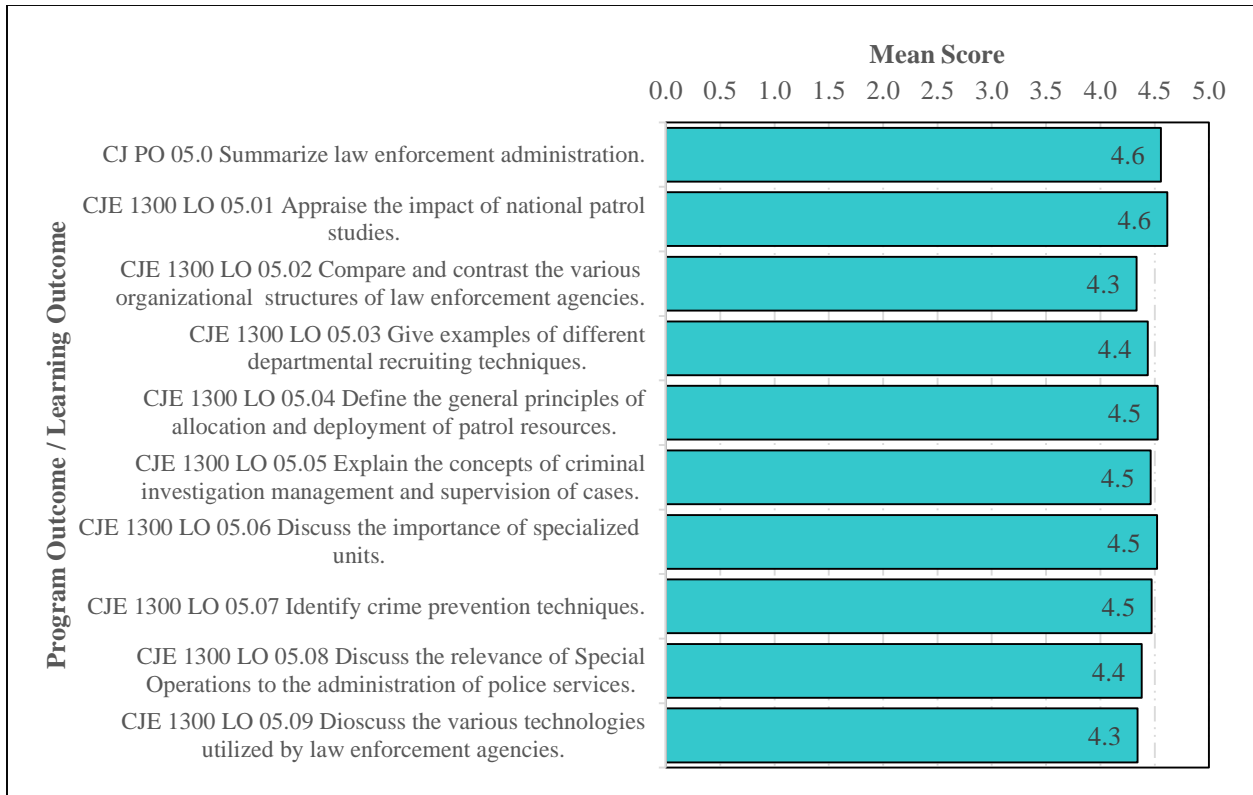


Figure 1. Bar graph of mean score by Outcome for CJE 1300.

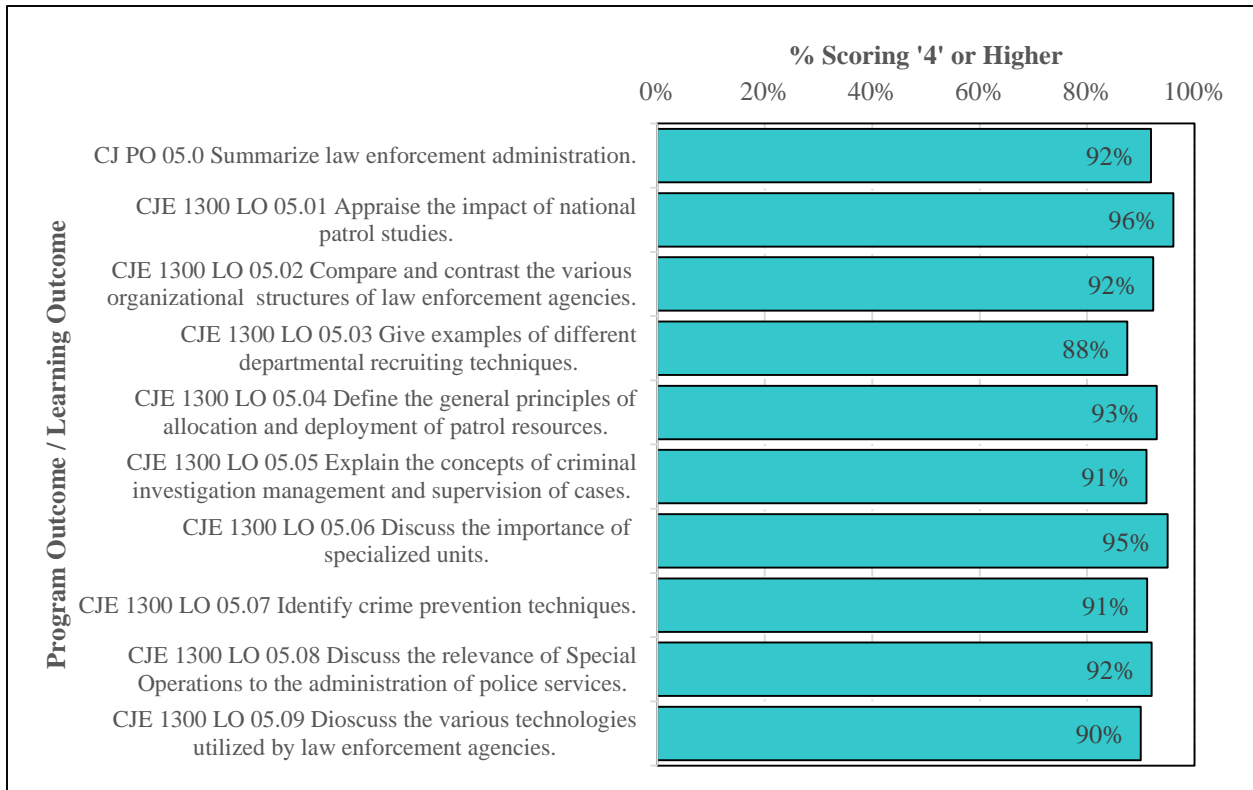


Figure 2. Bar graph of percentage of artifacts scoring '4' or higher by Outcome for CJE 1300.

## 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 spring 2017 so no comparison study between dual enrollment and non-dual enrollment could be completed.

### 2.2.2 Online to Traditional Comparison

During the spring 2017 semester, one course section was offered online while another was offered traditionally. While the online section reported data, only PO data was reported. No LO data was recorded. In fact, no LOs were listed in any of the rubrics in the course section. As a result, only a comparison of CJ PO 05.0 Summarize law enforcement administration could be completed. For the online section, 602 artifacts were scored for PO 05.0. For the traditional section, artifacts ranged from 48 (LO 05.03) to 289 (PO 05.0). A comparison of basic statistics is provided in Table 2. Online artifacts mean scores are higher for the only measured outcome (Figure 3). Percentage of artifacts scoring '4' or higher is lower for online artifacts for the only measured outcome (Figure 4). Differences in the means were tested for significance using a Welch's t-test according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999). The difference as found to be statistically significantly different. Therefore, we must reject the null hypothesis that the difference in the means of the online and traditional scores of these essays is equal to 0, and we can conclude this with a 95% confidence that the differences in scores are not solely due to chance.

<i>Outcomes</i>	<i>Traditional n</i>	<i>Traditional Mean</i>	<i>Traditional % Scoring 4 or Higher</i>	<i>Online n</i>	<i>Online Mean</i>	<i>Online % Scoring 4 or Higher</i>
CJ PO 05.0 Summarize law enforcement administration.	289	<b>4.4</b>	94%	602	<b>4.6</b>	91%
CJE 1300 LO 05.01 Appraise the impact of national patrol studies.	102	4.6	96%	~	~	~
CJE 1300 LO 05.02 Compare and contrast the various organizational structures of law enforcement agencies.	156	4.3	92%	~	~	~
CJE 1300 LO 05.03 Give examples of different departmental recruiting techniques.	48	4.4	88%	~	~	~
CJE 1300 LO 05.04 Define the general principles of allocation and deployment of patrol resources.	142	4.5	93%	~	~	~
CJE 1300 LO 05.05 Explain the concepts of criminal investigation management and supervision of cases.	56	4.5	91%	~	~	~
CJE 1300 LO 05.06 Discuss the importance of specialized units.	140	4.5	95%	~	~	~
CJE 1300 LO 05.07 Identify crime prevention techniques.	68	4.5	91%	~	~	~
CJE 1300 LO 05.08 Discuss the relevance of Special Operations to the administration of police services.	50	4.4	92%	~	~	~
CJE 1300 LO 05.09 Discuss the various technologies utilized by law enforcement agencies.	70	4.3	90%	~	~	~

Table 2. Comparison of basic statistics of student achievement level by Outcome for online and traditional. Statistically significant differences in the means between online and traditional sections is in **bold/italics**.

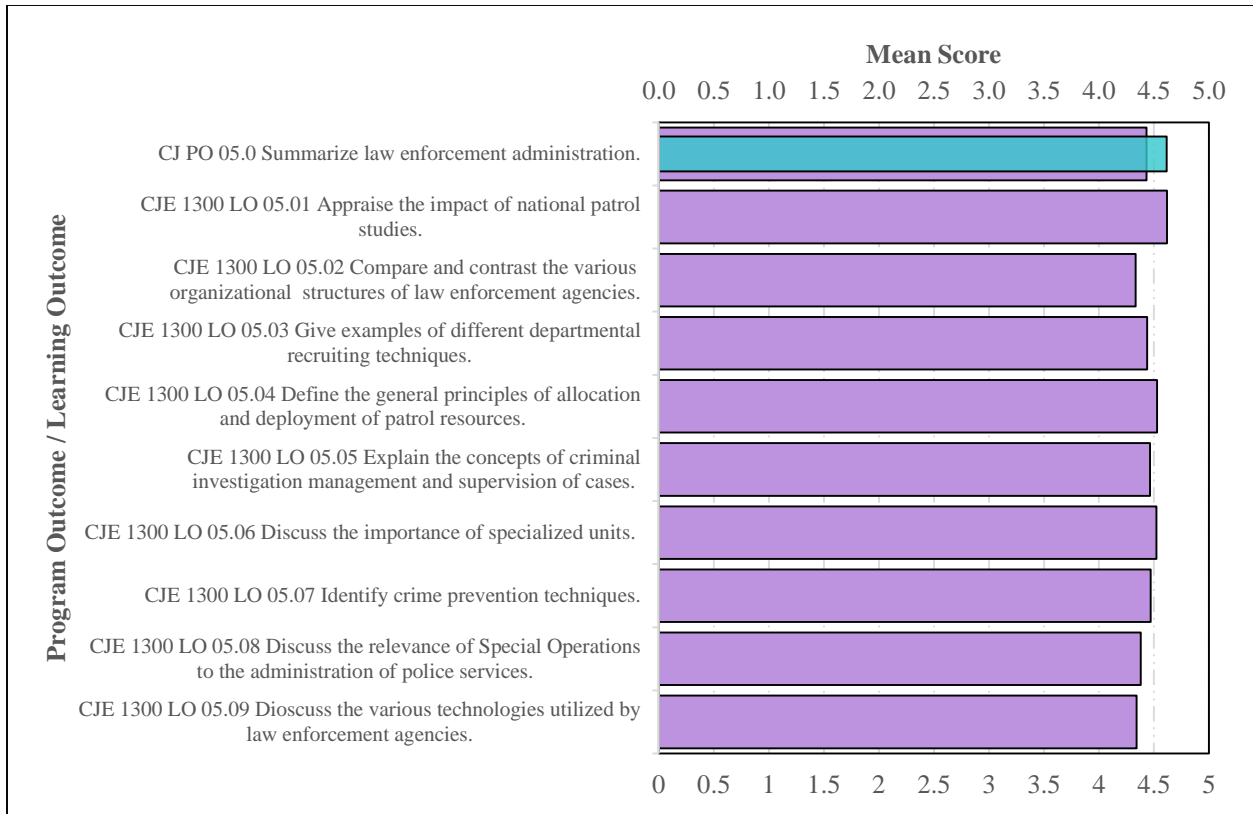


Figure 3. Comparison of mean scores by modality with Traditional (purple) and Online (aqua).

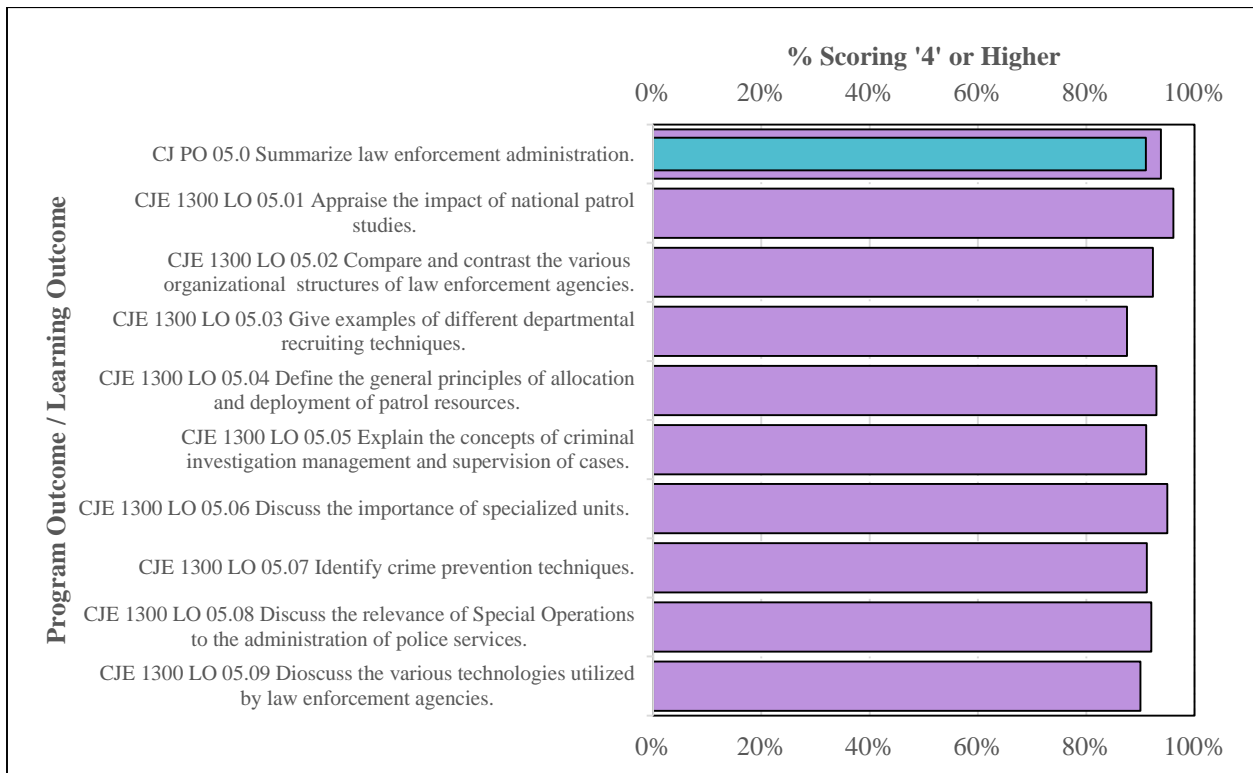


Figure 4. Comparison of percentage of artifacts scoring '4' or higher by modality with Traditional (purple) and Online (aqua).

Effect size was calculated using a method devised by Rosenthal and Rosnow (1991) for meta-analytical purposes in potential comparisons with other institutions (Lipsey and Wilson, 1993). The statistically significant results exhibit what Cohen (1988) would consider a small effect sizes. In other words, non-overlap score distribution from online artifacts to traditional artifacts is approximately 16%.

### 2.2.3 Comparison by Campus/Site

Since the only two sites in which courses were offered was Collier and FSW Online, results of this comparison are exhibited in 2.2.2 (see above).

## 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 CJE 2600

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## 3.1 LEARNING OBJECTIVES AND DESCRIPTIVE STATISTICS

The FSW Business faculty defined one area of interest for evaluation in support of the state framework which was clarified for the spring 2017 term. The outcomes related to CJE 2600 are:

- CJ PO 03.0 Identify criminal investigation procedures.
- CJE 2600 LO 03.01 Explain investigative techniques used in solving crimes.
- CJE 2600 LO 03.02 Explain general criminal laboratory techniques.
- CJE 2600 LO 03.03 Explain the necessity for and the methods of marking and preserving evidence.
- CJE 2600 LO 03.04 Discuss the necessity for and importance of crime scene protection.
- CJE 2600 LO 03.05 Discuss the importance of evidence to court proceedings following arrest.
- CJE 2600 LO 03.06 Identify various types of investigative technology.
- CJE 2600 LO 03.07 Describe the steps of a preliminary investigation.
- CJE 2600 LO 03.08 Demonstrate ability to draw a simple crime scene sketch.
- CJE 2600 LO 03.09 Discuss principles of proper interrogation techniques.
- CJE 2600 LO 03.10 Explain the importance of police records to the investigative process.

The measurement and objectives related to CJE 2600 are:

- 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 2017 semester, an enrollment of 56 contributed to scores tallied from 3 of 3 sections of CJE 2600. Descriptive statistics for achievement of outcomes are shown in Table 4. The graphical representation of mean scores is shown in Figure 5 and percentage of artifacts scoring ‘4’ or higher is shown in Figure 6. 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.

<i>Outcomes</i>	<i># of Assignments Linked to Outcome</i>	<i>n</i>	<i>Mean</i>	<i>% Scoring 4 or Higher</i>
CJ PO 03.0 Identify criminal investigation procedures.	28	1568	4.6	93%
CJE 2600 LO 03.01 Explain investigative techniques used in solving crimes.	28	1567	4.6	92%
CJE 2600 LO 03.02 Explain general criminal laboratory techniques.	5	235	4.3	89%
CJE 2600 LO 03.03 Explain the necessity for and the methods of marking and preserving evidence.	15	752	4.6	93%
CJE 2600 LO 03.04 Discuss the necessity for and importance of crime scene protection.	12	688	4.6	93%
CJE 2600 LO 03.05 Discuss the importance of evidence to court proceedings following arrest.	8	397	4.5	88%
CJE 2600 LO 03.06 Identify various types of investigative technology.	7	353	4.5	95%
CJE 2600 LO 03.07 Describe the steps of a preliminary investigation.	4	172	4.6	92%
CJE 2600 LO 03.08 Demonstrate ability to draw a simple crime scene sketch.	11	576	4.5	93%
CJE 2600 LO 03.09 Discuss principles of proper interrogation techniques.	22	1230	4.5	90%
CJE 2600 LO 03.10 Explain the importance of police records to the investigative process.	5	189	4.7	94%

Table 3. Student achievement level by Outcome for CJE 2600.

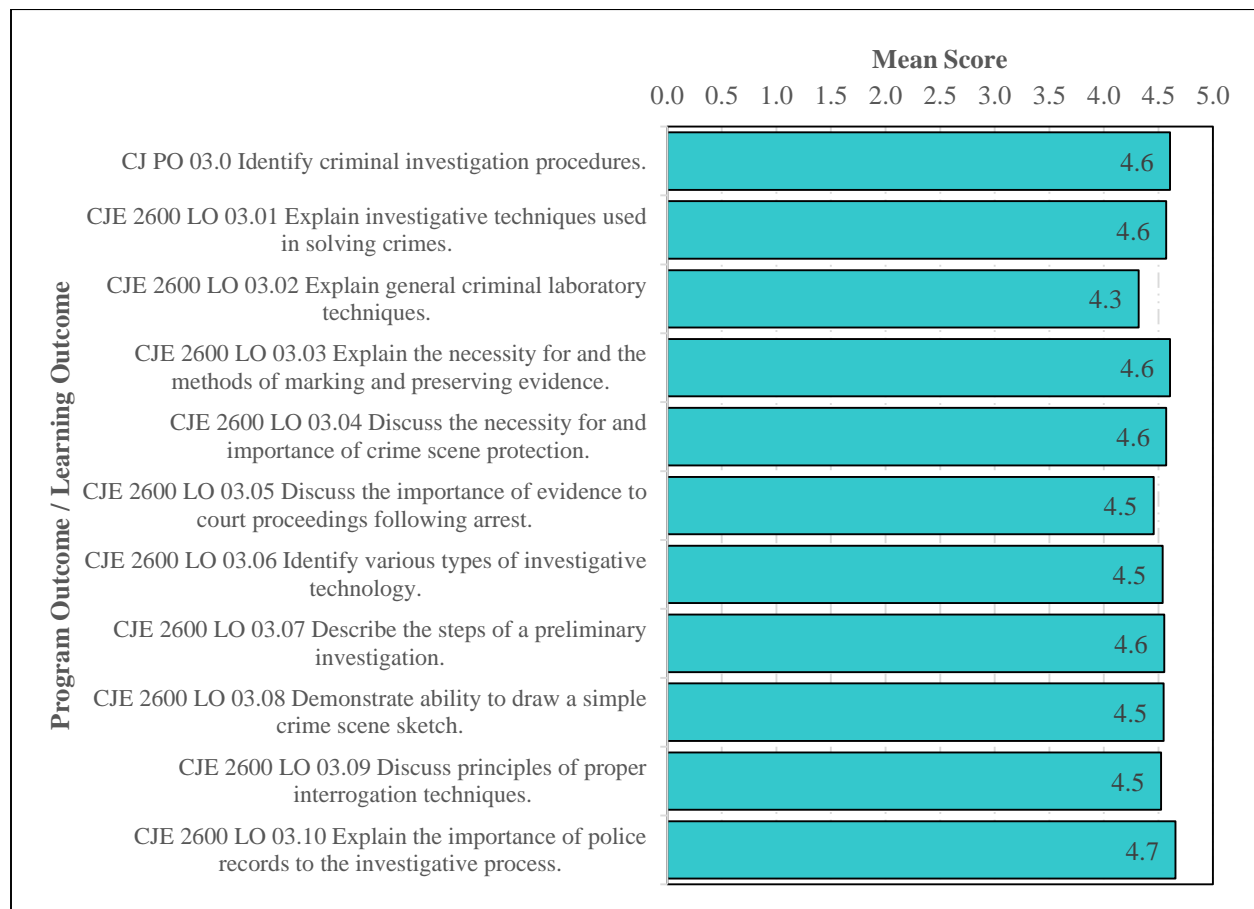


Figure 5. Bar graph of mean score by Outcome for CJE 2600.

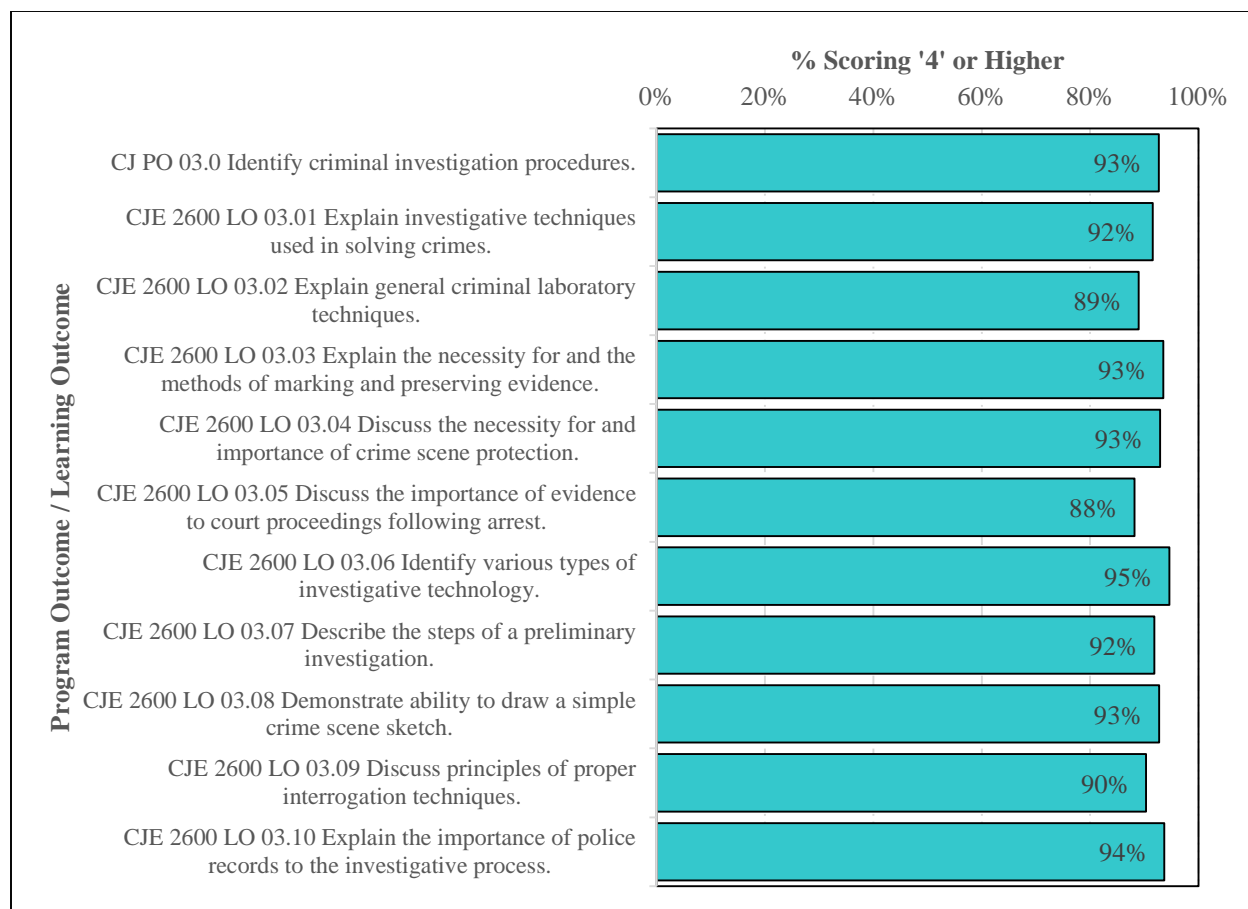


Figure 6. Bar graph of percentage of artifacts scoring '4' or higher by Outcome for CJE 2600.

### 3.2 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.

#### 3.2.1 Dual Enrollment to Non-Dual Enrollment Comparison

No dual enrollment sections of the course were run during spring 2017 so no comparison study between dual enrollment and non-dual enrollment could be completed.

#### 3.2.2 Online to Traditional Comparison

During the spring 2017 semester, one course section was offered online while another two were offered traditionally. All sections reported data. Depending on outcome, a range of 67-666 artifacts were scored from online sections compared with a range of 102-902 for traditional sections. A comparison of basic statistics is provided in Table 4. Online artifacts mean scores are lower for all outcomes (Figure 7). Percentage of artifacts scoring '4' or higher were lower for online artifacts for all outcomes except LO 03.10 (Figure 8). Differences in the means were tested for significance using a Welch's t-test according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999). All were found to be statistically significantly different with the exception of LO 03.10. Therefore, in the cases where statistical



significance was measured, we must reject the null hypothesis that the difference in the means of the online and traditional scores of these essays is equal to 0, and we can conclude this with a 95% confidence that the differences in scores are not solely due to chance.

Outcomes	Traditional n	Traditional Mean	Traditional % Scoring 4 or Higher	Online n	Online Mean	Online % Scoring 4 or Higher
CJ PO 03.0 Identify criminal investigation procedures.	902	<b>4.7</b>	93%	666	<b>4.5</b>	92%
CJE 2600 LO 03.01 Explain investigative techniques used in solving crimes.	902	<b>4.7</b>	93%	665	<b>4.4</b>	90%
CJE 2600 LO 03.02 Explain general criminal laboratory techniques.	122	<b>4.8</b>	98%	113	<b>3.8</b>	80%
CJE 2600 LO 03.03 Explain the necessity for and the methods of marking and preserving evidence.	428	<b>4.8</b>	94%	324	<b>4.4</b>	92%
CJE 2600 LO 03.04 Discuss the necessity for and importance of crime scene protection.	389	<b>4.8</b>	94%	299	<b>4.3</b>	91%
CJE 2600 LO 03.05 Discuss the importance of evidence to court proceedings following arrest.	235	<b>4.7</b>	90%	162	<b>4.2</b>	85%
CJE 2600 LO 03.06 Identify various types of investigative technology.	194	<b>4.8</b>	97%	159	<b>4.2</b>	92%
CJE 2600 LO 03.07 Describe the steps of a preliminary investigation.	102	<b>4.7</b>	94%	70	<b>4.3</b>	89%
CJE 2600 LO 03.08 Demonstrate ability to draw a simple crime scene sketch.	322	<b>4.8</b>	95%	254	<b>4.3</b>	90%
CJE 2600 LO 03.09 Discuss principles of proper interrogation techniques.	701	<b>4.7</b>	91%	529	<b>4.3</b>	89%
CJE 2600 LO 03.10 Explain the importance of police records to the investigative process.	122	4.7	92%	67	4.6	97%

Table 4. Comparison of basic statistics of student achievement level by Outcome for online and traditional. Statistically significant differences in the means between online and traditional sections is in **bold/italics**.

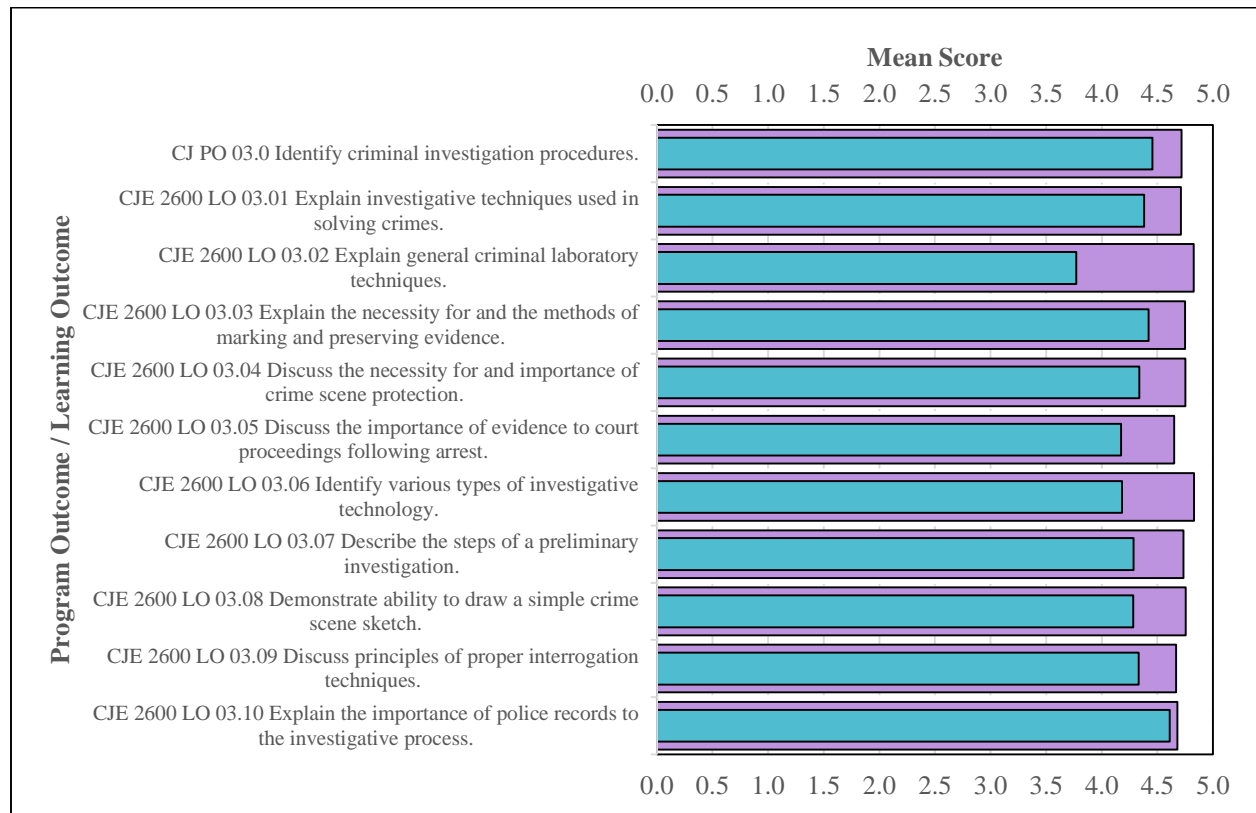


Figure 7. Comparison of mean scores by modality with Traditional (purple) and Online (aqua).

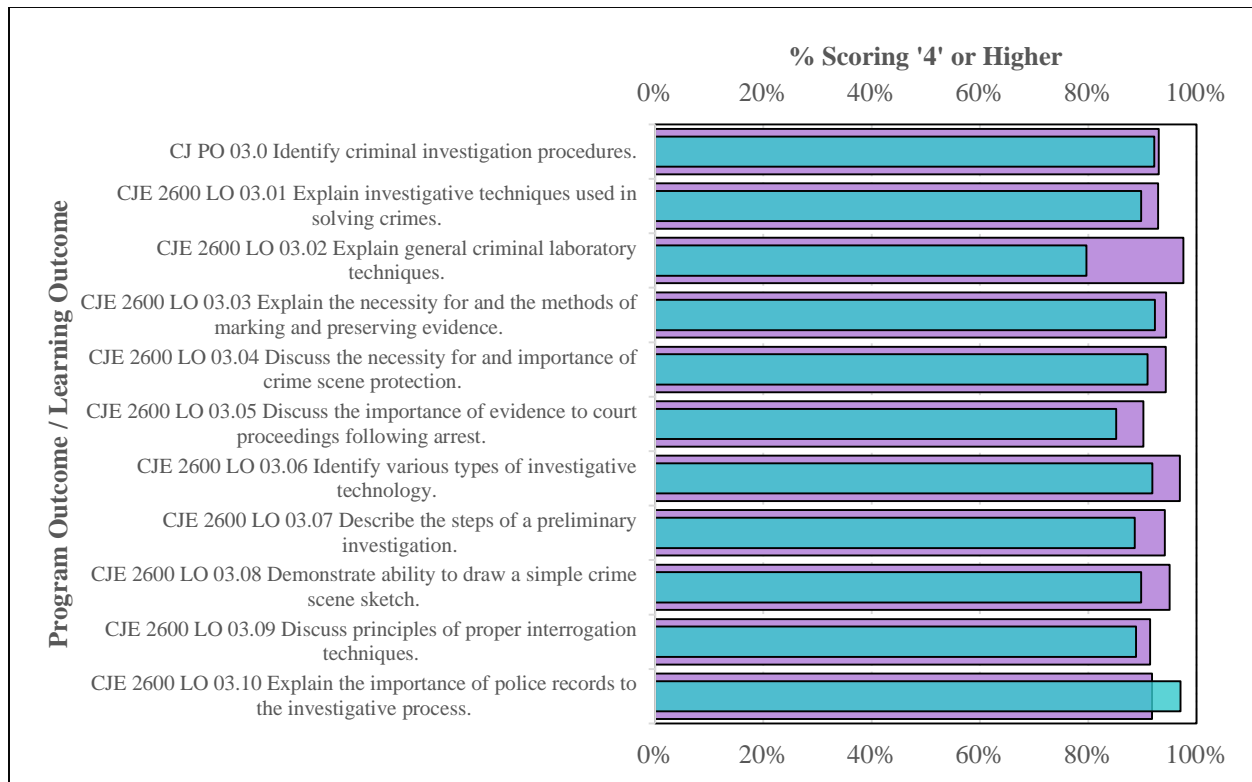


Figure 8. Comparison of percentage of artifacts scoring '4' or higher by modality with Traditional (purple) and Online (aqua).

Effect size was calculated using a method devised by Rosenthal and Rosnow (1991) for meta-analytical purposes in potential comparisons with other institutions (Lipsey and Wilson, 1993). The statistically significant results exhibit a range of what Cohen (1988) would consider small-to-large effect sizes. In other words, non-overlap score distribution from online artifacts to traditional artifacts is a range of approximately 7% to 57%.

### 3.2.3 Comparison by Campus/Site

Since the only two sites in which courses were offered was Thomas Edison (Lee) and FSW Online, results of this comparison are exhibited in 3.2.2 (see above).

## 3.3 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.

## 4 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 courses included in assessment are CJE 1010 *Police Organization and Administration* and CJE 2600 *Criminal Investigation Techniques*. The assessment outcomes are intended to provide a baseline and measurement of achievement moving forward.

## 4.1 CJE 1300

A drill-down of CJE 1300 results are as follows:

1. In a study of outcome achievement, “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.
2. In a study comparing Online with Traditional course sections, the online section reported data, only PO data was reported. No LO data was recorded. In fact, no LOs were listed in any of the rubrics in the course section. As a result, only a comparison of CJ PO 05.0 Summarize law enforcement administration could be completed. Online artifacts mean scores are higher for the only measured outcome and were found to be statistically significantly different.
3. No cross-campus comparison was completed because the only two sites in which courses were offered was Collier and FSW Online. Results of this comparison are exhibited in #2 above.

## 4.2 CJE 2600

A drill-down of CJE 2600 results are as follows:

1. In a study of outcome achievement, “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.
2. In a study comparing Online with Traditional course sections, Online artifacts mean scores are lower for all outcomes. Percentage of artifacts scoring ‘4’ or higher were lower for online artifacts for all outcomes except LO 03.10. Differences in the means were found to be statistically significantly different.
3. No cross-campus comparison study was completed because only two sites in which courses were offered was Thomas Edison (Lee) and FSW Online, results of this comparison are exhibited in #2 above.

## 5 REFERENCES

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