

Criminal Justice Assessment Report Fall 2021

Author: Joseph F. van Gaalen, Ph.D., Asst. VP of Institutional Research, 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 courses included in assessment are CJE 1300 *Police Organization and Administration*, CJL 2100 *Criminal Law*, 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 (concurrent) and non-dual enrollment students, by modality, 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. Vice President of Institutional Research, Assessment & Effectiveness, Academic Affairs (jfvangaalen@fsw.edu; x16965).

2 CJE 1300

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 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 Fall 2021 semester, an enrollment of 44 contributed to scores tallied from 2 of 2 sections of CJE 1300. 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 nearly met. Outcome mean scores range from 4.1 to 4.7. Outcome percent scoring 80% or higher range from 94% to 98%.

<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	1035	4.7	91%
CJE 1300 LO 05.01 Appraise the impact of national patrol studies.	11	128	4.1	76%
CJE 1300 LO 05.02 Compare and contrast the various organizational structures of law enforcement agencies.	15	866	4.7	93%
CJE 1300 LO 05.03 Give examples of different departmental recruiting techniques.	5	61	4.4	89%
CJE 1300 LO 05.04 Define the general principles of allocation and deployment of patrol resources.	15	178	4.2	76%
CJE 1300 LO 05.05 Explain the concepts of criminal investigation management and supervision of cases.	6	74	4.3	81%
CJE 1300 LO 05.06 Discuss the importance of specialized units.	14	178	4.1	76%
CJE 1300 LO 05.07 Identify crime prevention techniques.	7	81	4.1	75%
CJE 1300 LO 05.08 Discuss the relevance of Special Operations to the administration of police services.	5	71	4.5	90%
CJE 1300 LO 05.09 Discuss the various technologies utilized by law enforcement agencies.	7	93	4.1	74%

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

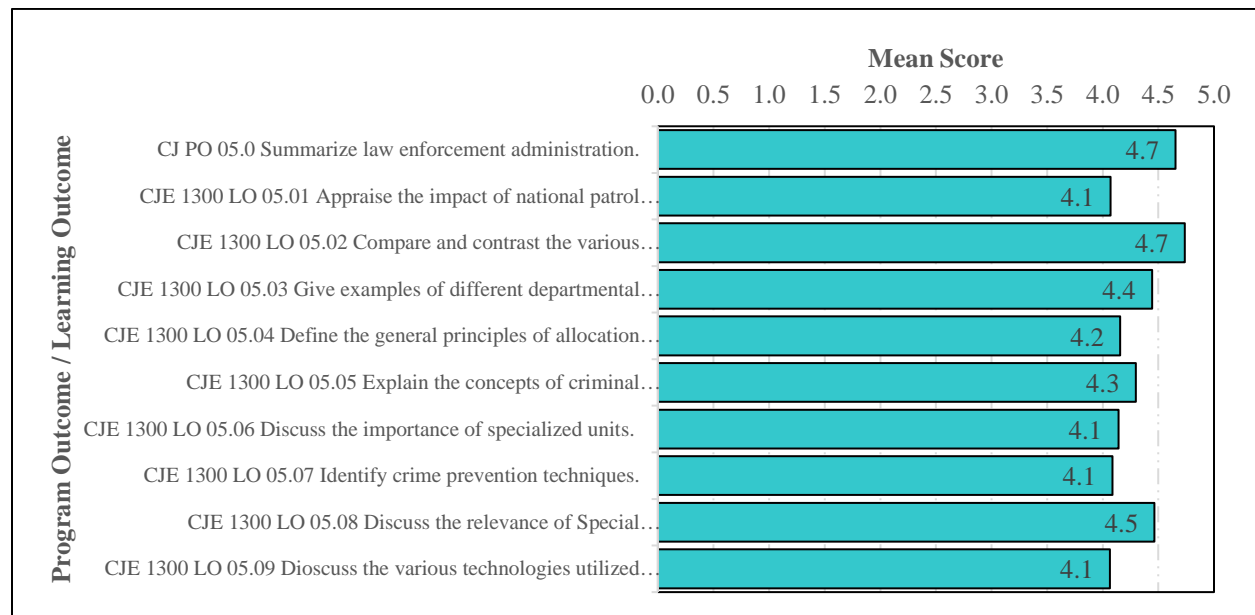


Figure 1. Bar graph of mean score by outcome for CJE 1300.

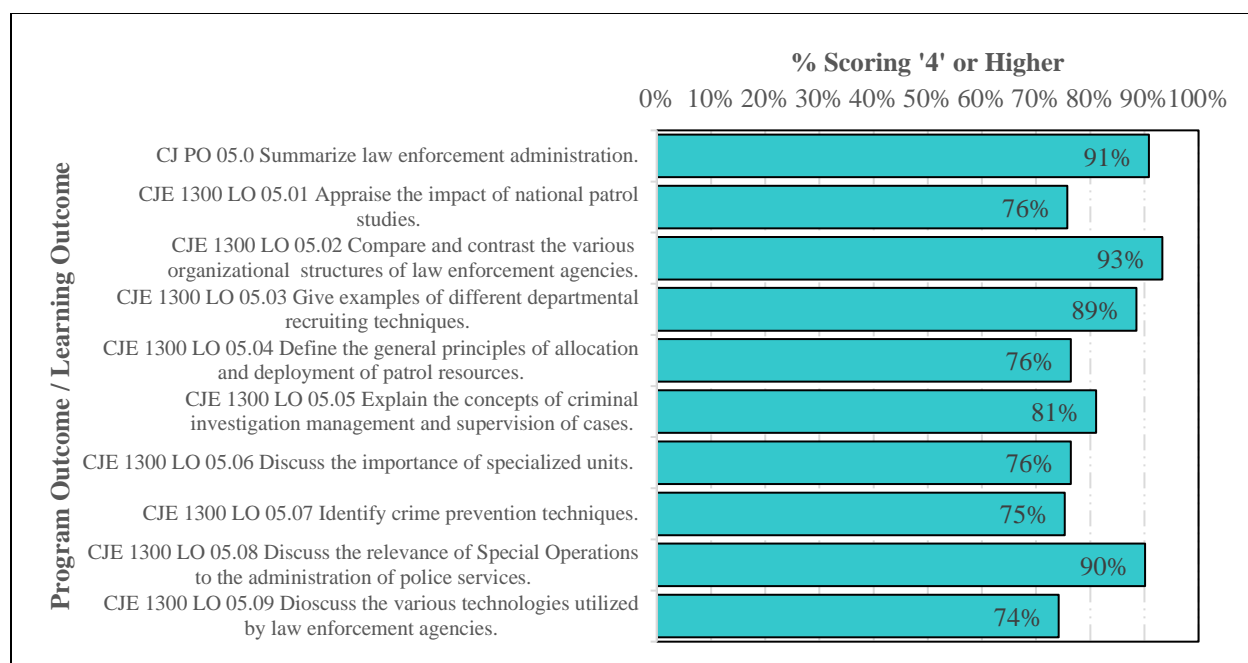


Figure 2. Bar graph of percentage of artifacts scoring '4' or higher by outcome for CJE 1300.

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 (Concurrent) to Non-Dual Enrollment Comparison

No dual enrollment (concurrent) sections of the course were run during fall 2021 so no comparison study between dual enrollment and non-dual enrollment could be completed.

2.2.2 Instructional Method Comparison

During the fall 2021 semester, one course section was offered asynchronous online while another was offered traditionally. For the asynchronous online section, the number of artifacts scored ranged from 22 to 689. For the traditional section, artifacts ranged from 39 to 346. A comparison of basic statistics is provided in Table 2. Online artifacts mean scores are higher in all cases in which there is comparable data (Figure 3). Percentage of artifacts scoring '4' or higher is also higher in all cases in which there is comparable data (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 differences are found to be statistically significantly different for all cases except LO 3 and LO 8. Therefore, we must reject the null hypothesis that the difference in the means of the asynchronous 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.	346	4.2	77%	689	4.9	98%
CJE 1300 LO 05.01 Appraise the impact of national patrol studies.	106	4.0	72%	22	4.5	95%
CJE 1300 LO 05.02 Compare and contrast the various organizational structures of law enforcement agencies.	177	4.1	76%	689	4.9	98%
CJE 1300 LO 05.03 Give examples of different departmental recruiting techniques.	39	4.4	85%	22	4.5	95%
CJE 1300 LO 05.04 Define the general principles of allocation and deployment of patrol resources.	156	4.1	74%	22	4.5	95%
CJE 1300 LO 05.05 Explain the concepts of criminal investigation management and supervision of cases.	52	4.2	75%	22	4.5	95%
CJE 1300 LO 05.06 Discuss the importance of specialized units.	156	4.1	74%	22	4.5	95%
CJE 1300 LO 05.07 Identify crime prevention techniques.	59	3.9	68%	22	4.5	95%
CJE 1300 LO 05.08 Discuss the relevance of Special Operations to the administration of police services.	49	4.4	88%	22	4.5	95%
CJE 1300 LO 05.09 Discuss the various technologies utilized by law enforcement agencies.	71	3.9	68%	22	4.5	95%

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**.

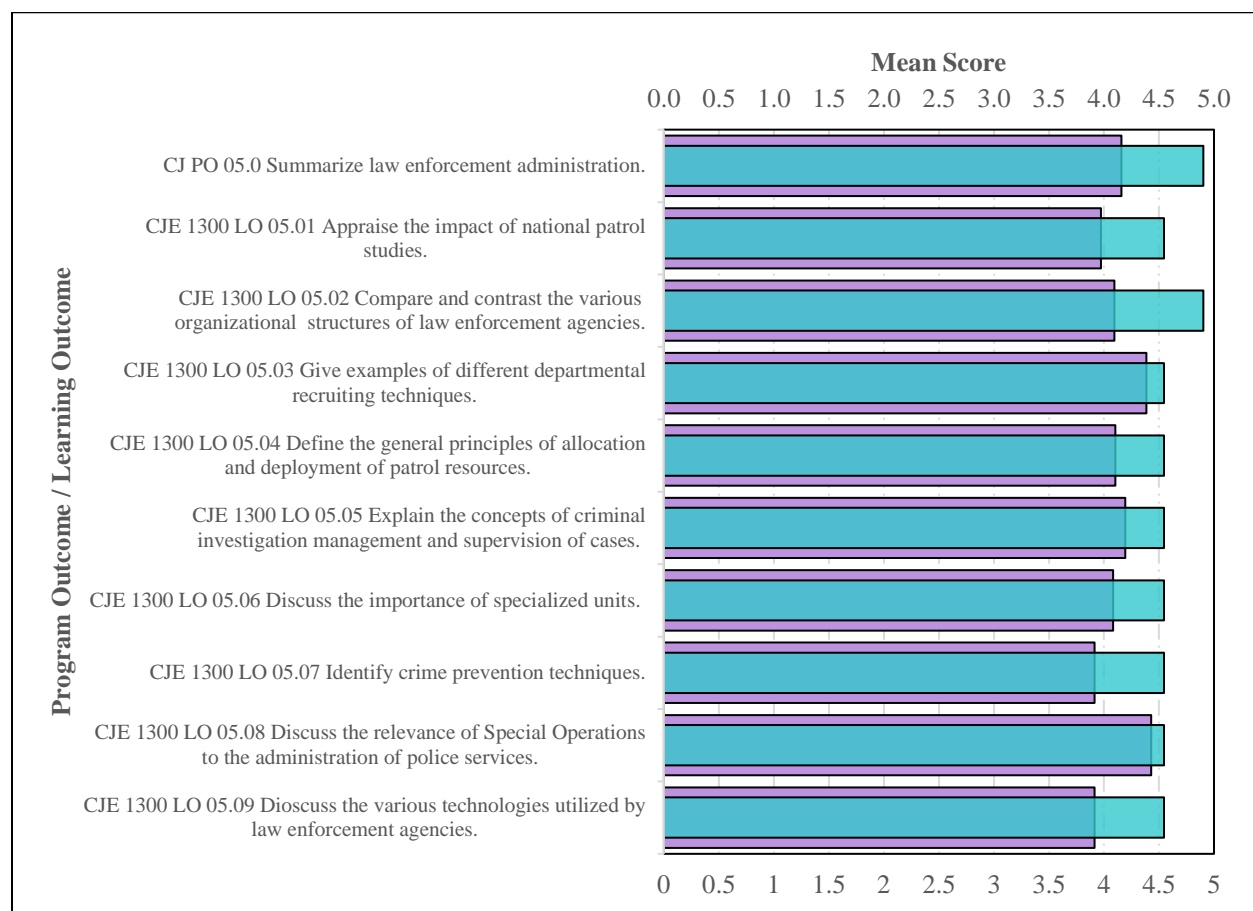


Figure 3. Comparison of mean scores by modality with Traditional (purple) and Online (aqua).



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 small-to-large effect sizes. In other words, non-overlap score distribution from online artifacts to traditional artifacts range from approximately 8% to 43%.

2.2.3 Comparison by Campus/Site

Since only one section was offered at a traditional site no comparison could be completed.

2.3 LONGITUDINAL STUDY

A description of achievement over time in CJE 1300 is shown below in Table 3. Results of each outcome for the Fall 2021 term compared with previous terms rank 2nd, 3rd, 3rd, 3rd, 3rd, 2nd, 3rd, 3rd, 2nd, and 3rd, respectively.

	PO 5.0	LO 05.01	LO 05.02	LO 05.03	LO 05.04	LO 05.05	LO 05.06	LO 05.07	LO 05.08	LO 05.09
Fall 2020	92%	78%	95%	93%	79%	81%	80%	82%	86%	89%
Spring 2021	95%	98%	94%	98%	98%	98%	98%	98%	98%	98%
Fall 2021	91%	76%	93%	89%	76%	81%	76%	75%	90%	74%

Table 3. Achievement over time for CJE 1300.

3 CJL 2100

3.1 LEARNING OBJECTIVES AND DESCRIPTIVE STATISTICS

The FSW Business faculty defined one area of interest for evaluation in support of the state framework for the fall 2021 term. The outcomes related to CJL 2100 are:

- CJ PO 08.0 Describe and discuss the field of criminal law.
- CJL 2100 LO 08.01 Explain how burden of proof relates to a criminal proceeding.
- CJL 2100 LO 08.02 Define and contrast civil and criminal proceedings.
- CJL 2100 LO 08.03 Identify the difference between procedural and substantive due process.
- CJL 2100 LO 08.04 Explain the legacy of English common law and its relationship to modern jurisprudence.
- CJL 2100 LO 08.05 Identify the legal elements of crimes.
- CJL 2100 LO 08.06 Discuss the implications of constitutional, case and statutory law and their relationship to the criminal justice system.
- CJL 2100 LO 08.07 Discuss legal defenses in criminal law.
- CJL 2100 LO 08.08 Discuss the Bill of Rights of the U.S. Constitution.
- CJL 2100 LO 08.09 Give an example of an ex post facto law.

The measurement and objectives related to CJL 2100 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 fall 2021 semester, data tallied from 3 of 3 sections of CJL 2100. Descriptive statistics for achievement of outcomes are shown in Table 2. The graphical representation of mean scores is shown in Figure 3 and percentage of artifacts scoring '4' or higher is shown in Figure 4. 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 08.0 Describe and discuss the field of criminal law.	29	1751	4.8	97%
CJL 2100 LO 08.01 Explain how burden of proof relates to a criminal proceeding.	21	1253	4.8	98%
CJL 2100 LO 08.02 Define and contrast civil and criminal proceedings.	5	268	4.7	96%
CJL 2100 LO 08.03 Identify the difference between procedural and substantive due process.	7	423	4.7	96%
CJL 2100 LO 08.04 Explain the legacy of English common law and its relationship to modern jurisprudence.	3	197	4.6	95%
CJL 2100 LO 08.05 Identify the legal elements of crimes.	19	1124	4.8	98%
CJL 2100 LO 08.06 Discuss the implications of constitutional, case and statutory law and their relationship to the criminal justice system.	13	766	4.8	97%
CJL 2100 LO 08.07 Discuss legal defenses in criminal law.	3	191	4.7	96%
CJL 2100 LO 08.08 Discuss the Bill of Rights of the U.S. Constitution.	15	878	4.8	97%
CJL 2100 LO 08.09 Give an example of an ex post facto law.	4	228	4.7	96%

Table 4. Student achievement level by outcome for CJL 2100.

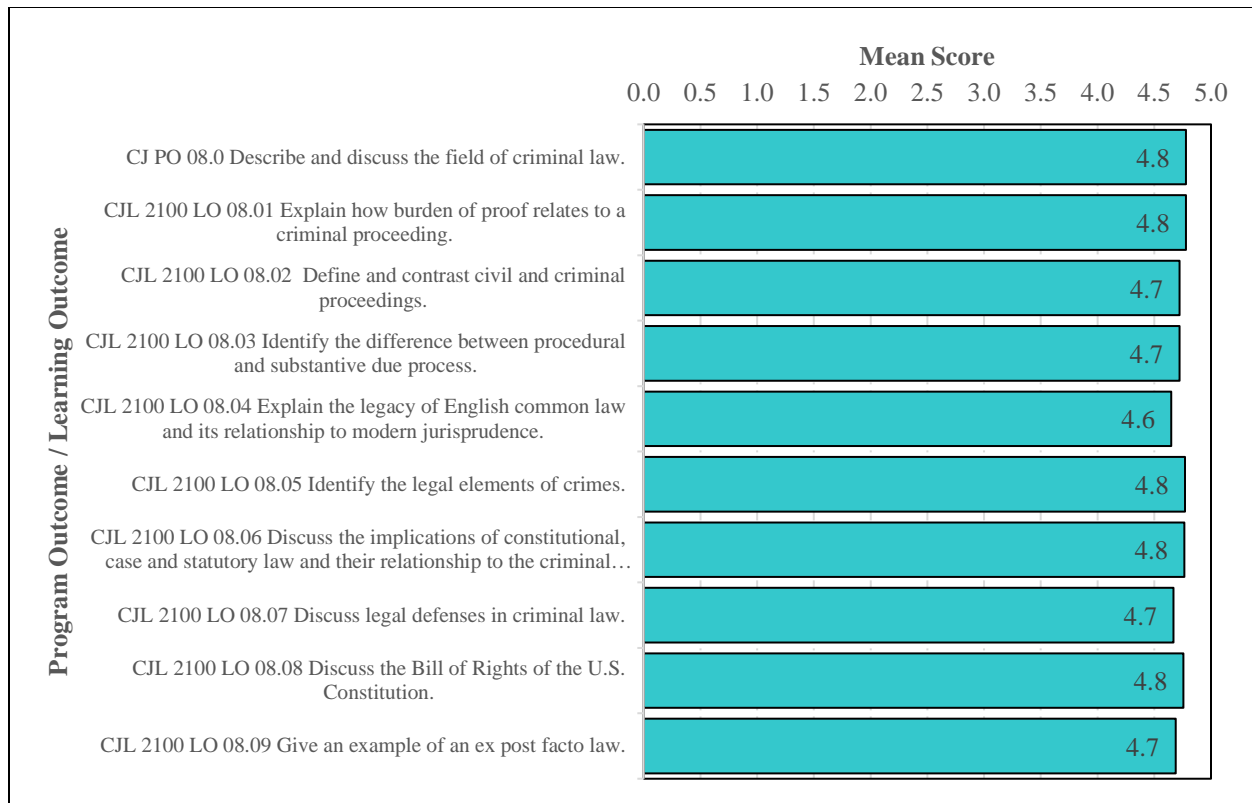


Figure 5. Bar graph of mean score by outcome for CJL 2100.

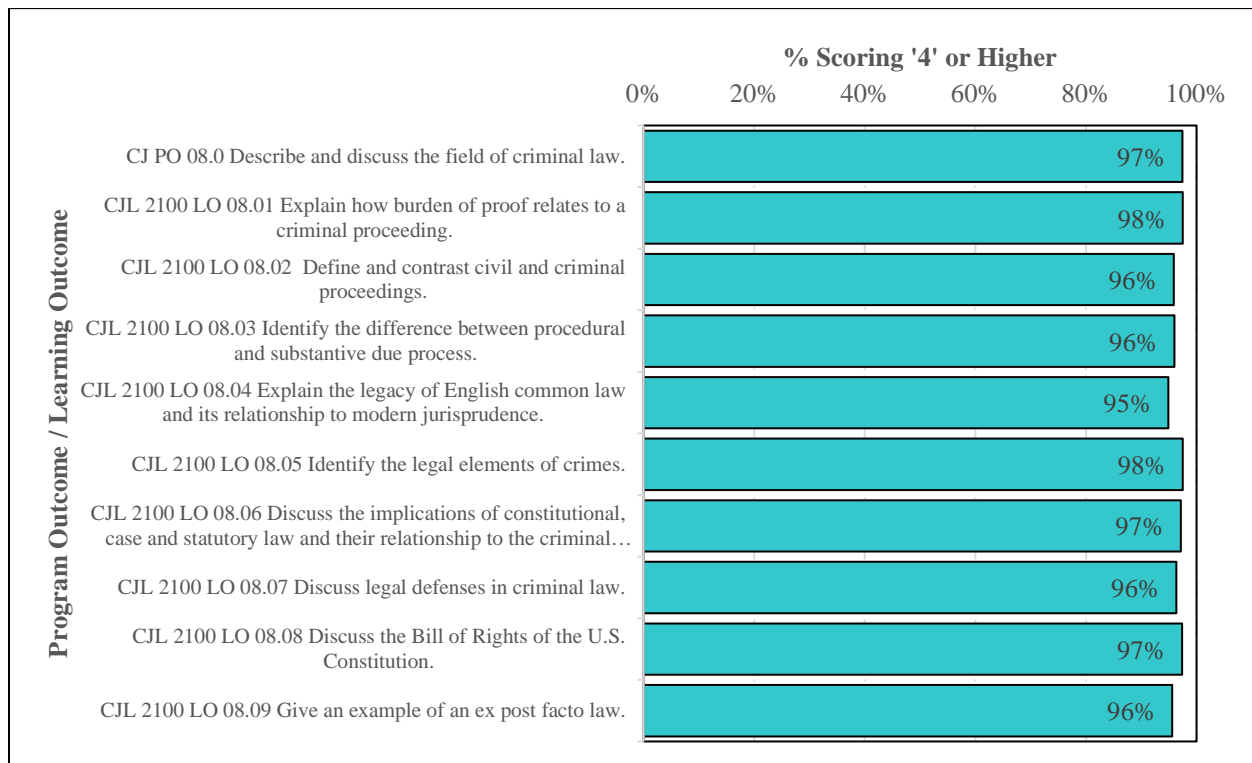


Figure 6. Bar graph of percentage of artifacts scoring '4' or higher by outcome for CJL 2100.

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 fall 2021 so no comparison study between dual enrollment and non-dual enrollment could be completed.

3.2.2 Instructional Method Comparison

FSW offers five instructional methods of study. Those five are traditional (face-to-face), asynchronous online, live online, flex (some of the class is via Zoom while the remainder is in class), and blended (some class sessions are offered online while others are in class). Achievement by instructional method is shown in Table 3 below. Of the two instructional methods utilized in the term (asynchronous online and flex), Flex exhibits the highest in all nine learning outcomes as well as the program outcome.

<i>Outcomes</i>	<i>Traditional</i>	<i>Async Online</i>	<i>Live Online</i>	<i>Flex</i>	<i>Blended</i>
CJ PO 08.0	~	97%	~	99%	~
LO 08.01	~	97%	~	99%	~
LO 08.02	~	95%	~	99%	~
LO 08.03	~	96%	~	97%	~
LO 08.04	~	94%	~	98%	~
LO 08.05	~	97%	~	99%	~
LO 08.06	~	96%	~	99%	~
LO 08.07	~	96%	~	98%	~
LO 08.08	~	97%	~	99%	~
LO 08.09	~	95%	~	97%	~

Table 5. Achievement by instructional method.

3.2.3 Comparison by Campus/Site

Of the artifacts collected from CJL 2100, only one site (Thomas Edison (Lee)) had a section run, and so no comparison by campus/site was completed.

3.3 LONGITUDINAL STUDY

A description of achievement over time in CJL 2100 is shown below in Table 6. Results of each outcome for the Fall 2021 term compared with previous terms rank 2nd, 2nd, 1st, 2nd, 1st, 2nd, 2nd, 2nd, and 2nd, respectively.

	PO 8.0	LO 08.01	LO 08.02	LO 08.03	LO 08.04	LO 08.05	LO 08.06	LO 08.07	LO 08.08	LO 08.09
<i>Fall 2020</i>	99%	99%	96%	97%	94%	99%	98%	97%	99%	97%
<i>Spring 2021</i>	89%	89%	89%	92%	91%	90%	88%	92%	89%	89%
<i>Fall 2021</i>	97%	98%	96%	96%	95%	98%	97%	96%	97%	96%

Table 6. Achievement over time for CJL 2100.

4 CJE 2600

4.1 LEARNING OBJECTIVES AND DESCRIPTIVE STATISTICS

The FSW Business faculty defined one area of interest for evaluation in support of the state framework for the Fall 2021 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 Fall 2021 semester, an enrollment of 62 contributed to scores tallied from 3 of 3 sections of CJE 2600. Descriptive statistics for achievement of outcomes are shown in Table 7. The graphical representation of mean scores is shown in Figure 7 and percentage of artifacts scoring '4' or higher is shown in Figure 8. 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 4.7 to 4.8. Outcome percent scoring 80% or higher range from 92% to 96%.

<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	1034	4.7	96%
CJE 2600 LO 03.01 Explain investigative tech in solving crimes.	28	1031	4.7	95%
CJE 2600 LO 03.02 Explain general criminal laboratory techniques.	5	154	4.7	92%
CJE 2600 LO 03.03 Explain the necessity for and the methods of marking and preserving evidence.	15	487	4.8	95%
CJE 2600 LO 03.04 Discuss necessity/import cr scene protection.	12	438	4.7	94%
CJE 2600 LO 03.05 Discuss import evidence to court proceedings.	8	265	4.7	94%
CJE 2600 LO 03.06 Identify various types of investigative tech.	7	229	4.7	93%
CJE 2600 LO 03.07 Describe the steps of a preliminary investigation.	4	123	4.7	92%
CJE 2600 LO 03.08 Demonstrate ability to draw crime scene sketch.	11	395	4.7	95%
CJE 2600 LO 03.09 Discuss principles interrogation techniques.	22	811	4.7	95%
CJE 2600 LO 03.10 Explain the importance of police records to the investigative process.	5	129	4.7	93%

Table 7. Student achievement level by outcome for CJE 2600.

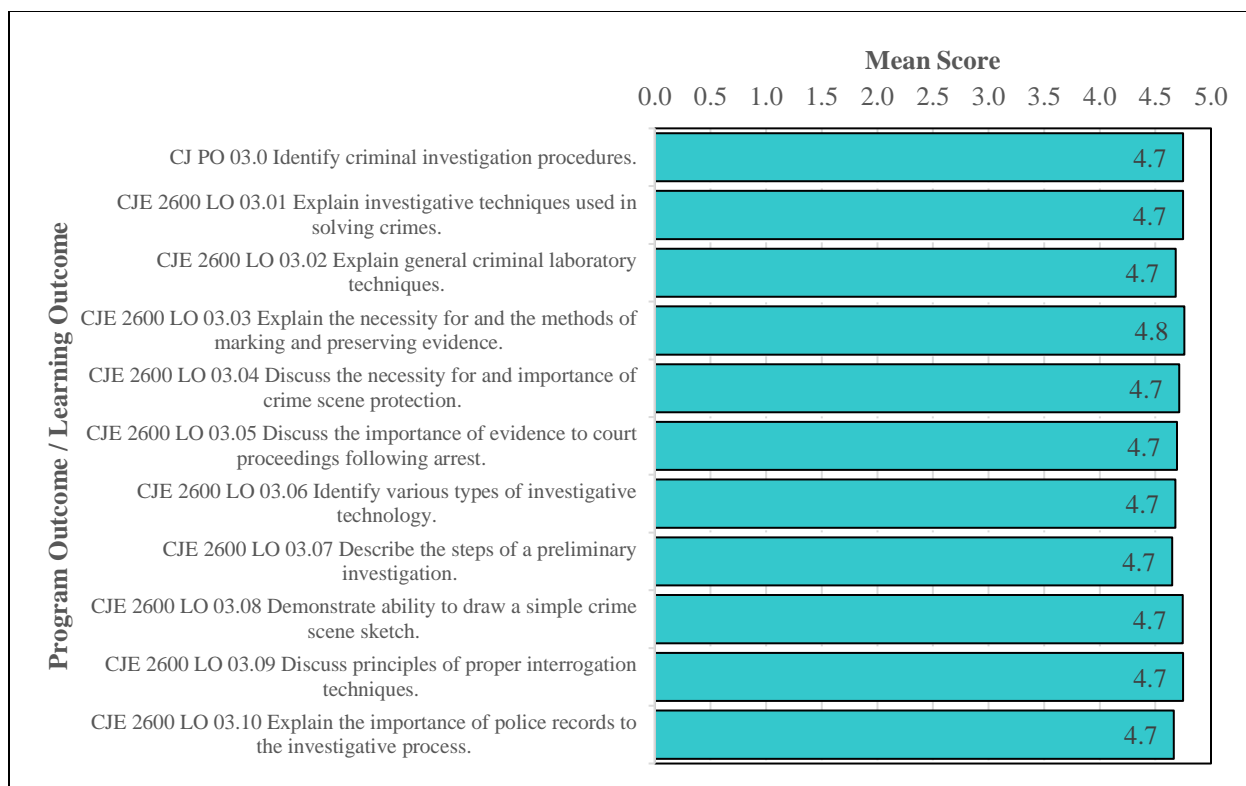


Figure 7. Bar graph of mean score by outcome for CJE 2600.

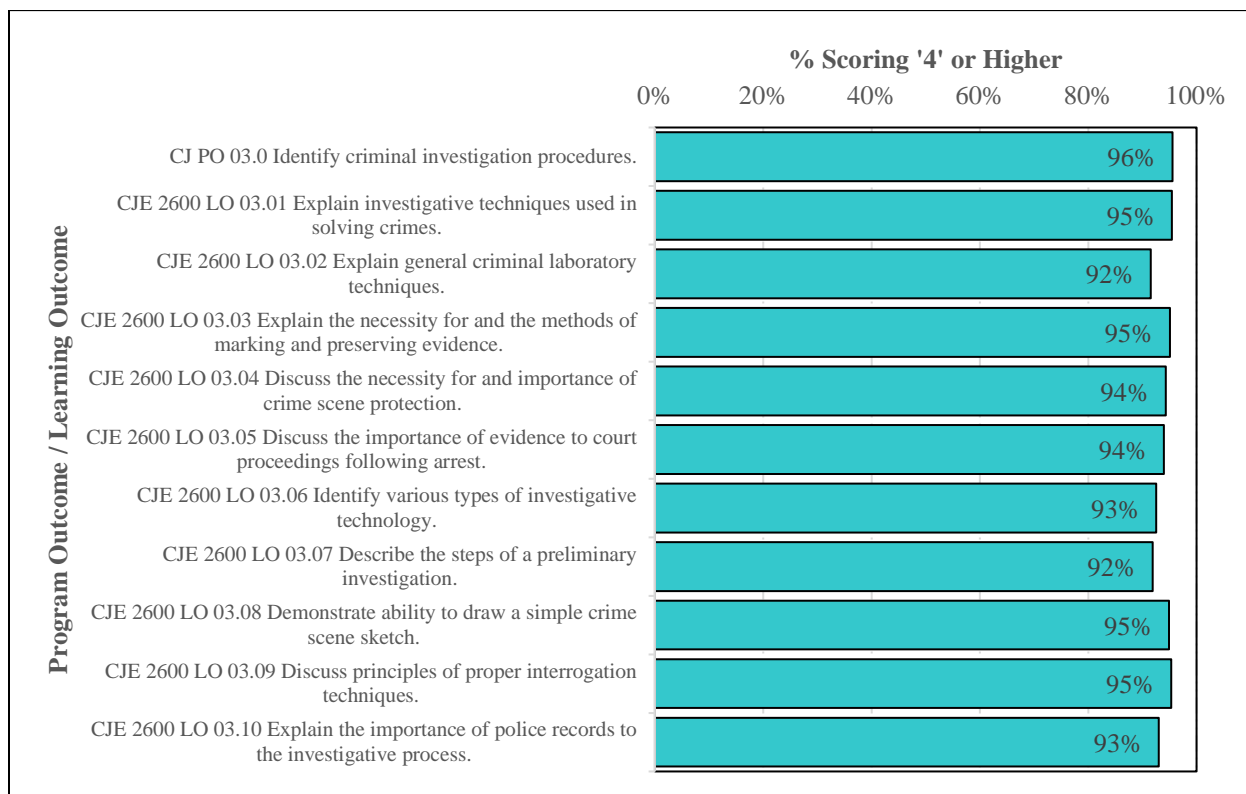


Figure 8. Bar graph of percentage of artifacts scoring '4' or higher by outcome for CJE 2600.

4.2 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.

4.2.1 Dual Enrollment (Concurrent) to Non-Dual Enrollment Comparison

No dual enrollment (concurrent) sections of the course were run during fall 2021 so no comparison study between dual enrollment and non-dual enrollment could be completed.

4.2.2 Instructional Method Comparison

FSW offers five instructional methods of study. Those five are traditional (face-to-face), asynchronous online, live online, flex (some of the class is via Zoom while the remainder is in class), and blended (some class sessions are offered online while others are in class). Achievement by instructional method is shown in Table 8 below. Of the two instructional methods utilized in the term (traditional and asynchronous online), traditional exhibits the highest in 6 of 10 learning outcomes as well as the program outcome.

<i>Outcomes</i>	<i>Traditional</i>	<i>Async Online</i>	<i>Live Online</i>	<i>Flex</i>	<i>Blended</i>
CJ PO 03.0 Identify criminal investigation procedures.	94%	96%	~	~	~
CJE 2600 LO 03.01 Explain investigative tech in solving crimes.	94%	96%	~	~	~
CJE 2600 LO 03.02 Explain general criminal laboratory techniques.	96%	89%	~	~	~
CJE 2600 LO 03.03 Explain the necessity for and the methods of marking and preserving evidence.	96%	94%	~	~	~
CJE 2600 LO 03.04 Discuss necessity/import cr scene protection.	95%	94%	~	~	~
CJE 2600 LO 03.05 Discuss import evidence to court proceedings.	95%	93%	~	~	~
CJE 2600 LO 03.06 Identify various types of investigative tech.	94%	91%	~	~	~
CJE 2600 LO 03.07 Describe the steps of a preliminary investigation.	92%	92%	~	~	~
CJE 2600 LO 03.08 Demonstrate ability to draw crime scene sketch.	95%	95%	~	~	~
CJE 2600 LO 03.09 Discuss principles interrogation techniques.	94%	96%	~	~	~
CJE 2600 LO 03.10 Explain the importance of police records to the investigative process.	95%	91%	~	~	~

Table 8. Achievement by instructional method.

4.2.3 Comparison by Campus/Site

FSW has three campuses, one learning center, and multiple concurrent dual enrollment offsite locations. Achievement by site is shown in Table 9 below. Of the two sites utilized in the term (Collier and Lee), Collier exhibits the highest achievement in all learning outcomes as well as the program outcome.

<i>Outcomes</i>	<i>Charlotte</i>	<i>Collier</i>	<i>Hendry/ Glades</i>	<i>Lee</i>	<i>Dual Enrollment</i>
CJ PO 03.0 Identify criminal investigation procedures.	~	100%	~	94%	~
CJE 2600 LO 03.01 Explain investigative tech in solving crimes.	~	100%	~	94%	~
CJE 2600 LO 03.02 Explain general criminal laboratory techniques.	~	100%	~	96%	~
CJE 2600 LO 03.03 Explain the necessity for and the methods of marking and preserving evidence.	~	100%	~	96%	~
CJE 2600 LO 03.04 Discuss necessity/import cr scene protection.	~	100%	~	95%	~
CJE 2600 LO 03.05 Discuss import evidence to court proceedings.	~	100%	~	95%	~
CJE 2600 LO 03.06 Identify various types of investigative tech.	~	100%	~	94%	~
CJE 2600 LO 03.07 Describe the steps of a preliminary investigation.	~	100%	~	91%	~
CJE 2600 LO 03.08 Demonstrate ability to draw crime scene sketch.	~	100%	~	95%	~
CJE 2600 LO 03.09 Discuss principles interrogation techniques.	~	100%	~	94%	~
CJE 2600 LO 03.10 Explain the importance of police records to the investigative process.	~	100%	~	95%	~

Table 9. Achievement by site.

4.3 LONGITUDINAL STUDY

A description of achievement over time in CJE 6200 is shown below in Table 10. Results of each outcome for the Fall 2021 term compared with previous terms rank 1st, 2nd, 2nd, 1st, 1st, 2nd, 2nd, 2nd, 1st, 2nd, and 2nd, respectively.

	PO 3.0	LO 03.01	LO 03.02	LO 03.03	LO 03.04	LO 03.05	LO 03.06	LO 03.07	LO 03.08	LO 03.09	LO 03.10
<i>Fall 2020</i>	96%	96%	94%	95%	94%	97%	94%	97%	94%	96%	97%
<i>Spring 2021</i>	85%	84%	83%	85%	85%	87%	86%	83%	84%	84%	86%
<i>Fall 2021</i>	96%	95%	92%	95%	94%	94%	93%	92%	95%	95%	93%

Table 10. Achievement over time for CJE 1300.

5 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 1300 *Police Organization and Administration*, CJL 2100 *Criminal Law*, and CJE 2600 *Criminal Investigation Techniques*. The assessment outcomes are intended to provide a baseline and measurement of achievement moving forward.

5.1 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. Outcome mean scores range from 4.1 to 4.7. Outcome percent scoring 80% or higher range from 94% to 98%.
2. During the fall 2021 semester, one course section was offered asynchronous online while another was offered traditionally. For the asynchronous online section, the number of artifacts scored ranged from 22 to 689. For the traditional section, artifacts ranged from 39 to 346. Online artifacts mean scores are higher in all cases in which there is comparable data. The differences are found to be statistically significantly different for all cases except LO 3 and LO 8.
3. Since only one section was offered at a traditional site no comparison could be completed.
4. Results of each outcome for the Fall 2021 term compared with previous terms rank 2nd, 3rd, 3rd, 3rd, 2nd, 3rd, 3rd, 2nd, and 3rd, respectively.

5.2 CJL 2100

A drill-down of CJL 2100 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 comparison of achievement by instructional method, of the two instructional methods utilized in the term (asynchronous online and flex), Flex exhibits the highest in all nine learning outcomes as well as the program outcome.
3. Of the artifacts collected from CJL 2100, only one site (Thomas Edison (Lee)) had a section run, and so no comparison by campus/site was completed.
4. Results of each outcome for the Fall 2021 term compared with previous terms rank 2nd, 2nd, 1st, 2nd, 1st, 2nd, 2nd, 2nd, and 2nd, respectively.

5.3 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. Outcome mean scores range from 4.7 to 4.8. Outcome percent scoring 80% or higher range from 92% to 96%.
2. In a study comparing instructional method, of the two instructional methods utilized in the term (traditional and asynchronous online), traditional exhibits the highest in 6 of 10 learning outcomes as well as the program outcome.
3. In a study comparing by campus/site, of the two sites utilized in the term (Collier and Lee), Collier exhibits the highest achievement in all learning outcomes as well as the program outcome.
4. Results of each outcome for the Fall 2021 term compared with previous terms rank 1st, 2nd, 2nd, 1st, 1st, 2nd, 2nd, 2nd, 1st, 2nd, and 2nd, respectively.

6 REFERENCES

- Cohen, J. 1988. Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Earlbaum Associates, Hillsdale, NJ.
- Davis, J.C. 1973. Statistics and Data Analysis in Geology. John Wiley & Sons, New York, New York, 564 pp.
- Lipsey, M.W. and Wilson, D.B. 1993. The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. *American Psychologist*, 48, 1181-1209.
- McDonald, J.H. 2009. Handbook of Biological Statistics (2nd ed.). Sparky House Publishing, Baltimore, Maryland.
- Rosenthal, R. and Rosnow, R.L. 1991. Essentials of behavioral research: Methods and data analysis (2nd ed.). McGraw Hill, New York, NY.
- Wilkinson, L. 1999. APA Task Force on Statistical Inference. Statistical Methods in Psychology Journals: Guidelines and Explanations. *American Psychologist* 54 (8), 594–604.