

EMS Assessment Report

Fall 2021

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1 INTRODUCTION

Florida SouthWestern State College's Emergency Medical Services Program began a study in AY 2018-19 exploring comparative achievement in the Paramedic College Credit Certificate and the Emergency Medical Services AS Program. The study consists of three parts, the first two of which are course level assessments; one from a CCC/AS course (EMS 2119 *Fundamentals of Emergency Medical Care*) and the second from an AS specific course (EMS 2661 *Paramedic Field Internship*).

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 concurrent 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, Asst. Vice President of Institutional Research, Assessment & Effectiveness, Academic Affairs (jfvangaalen@fsw.edu; x16965).

2 EMS 2119

2.1 LEARNING OUTCOMES, OBJECTIVES, AND DESCRIPTIVE STATISTICS

The FSW Emergency Medical Services Program Director defined a goal of determining general baseline results for core components of the EMS 2119 course for the Fall 2021 term.

During the Fall 2021 semester, an enrollment of 81 contributed to scores tallied from 3 of 3 sections of EMS 2119. Descriptive statistics for achievement of outcomes are shown in Table 1. A distribution of scores is shown in Figure 1. Mean scores are described herein as percentages because total scores vary by examination. Mean scores range from 87% to 93%. Trauma Unit exhibits the highest mean score at 93%.

<i>Core Exams</i>	<i>n</i>	<i>Mean (as %)</i>
Airway & Respiratory	81	86%
Cardiology	81	92%
Operations Unit	81	87%
Medical Unit	81	87%
Trauma Unit	81	93%
OB & PEDS Unit	81	88%

Table 1. Student achievement level by Outcome for EMS 2119.

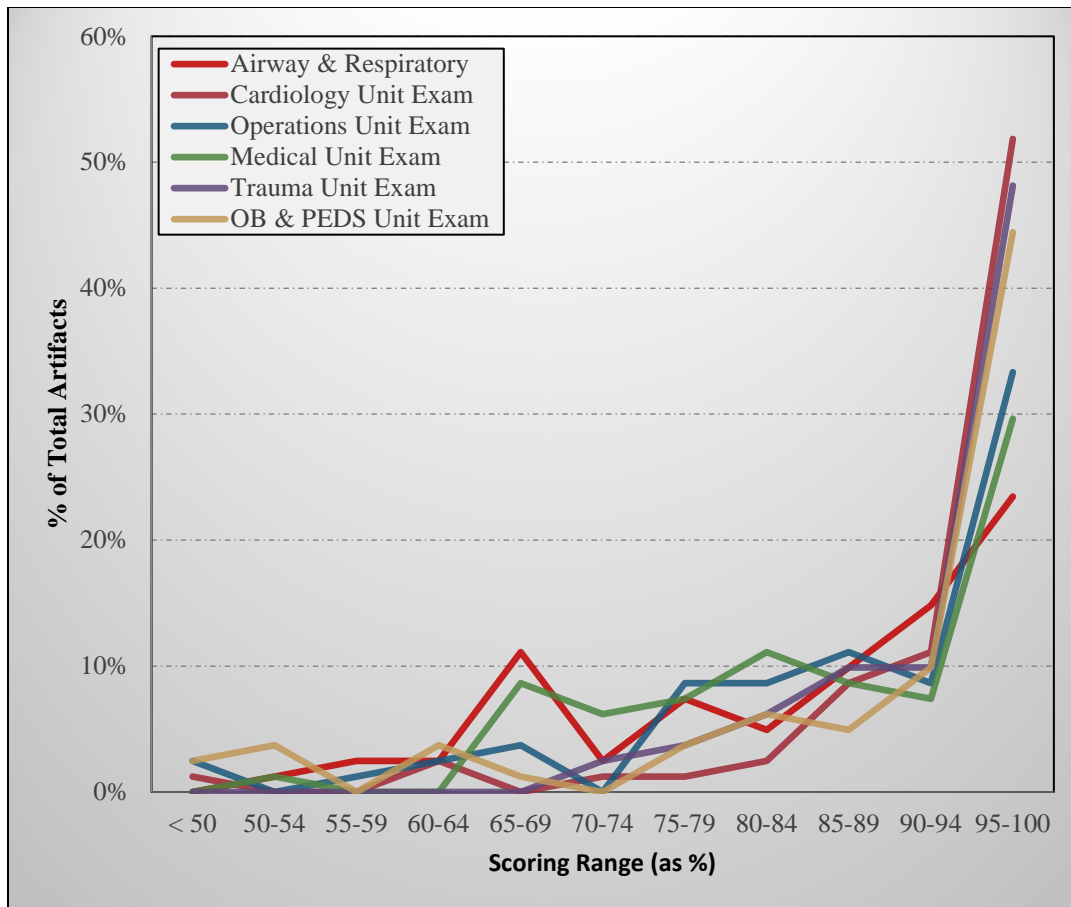


Figure 1. Line graph of score distribution for EMS 2119.

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

2.2.2 Modality Comparison

No variation in modalities is offered for this course, so no comparison study could be completed.

2.2.3 Comparison by Campus/Site

Of the 81 artifacts collected from EMS 2119, 26 for each exam originated from the Charlotte campus, 27 from the Collier campus, and 30 for each exam from the Thomas Edison (Lee) campus. A comparison of mean scores is provided in Table 2 and graphically represented in Figure 2. The Collier campus exhibits the highest mean score in four of six of the exams followed by Lee, with two, and Charlotte, with zero.

	Airway & Respiratory	Cardiology Unit Exam	Operations Unit Exam	Medical Unit Exam	Trauma Unit Exam	OB & PEDS Unit Exam
Charlotte	82%	89%	81%	84%	92%	88%
Collier	84%	97%	91%	87%	97%	90%
Thomas Edison (Lee)	92%	90%	87%	88%	90%	87%

Table 2. Comparison of mean scores by site. Blue/Bold denotes highest among all sites.

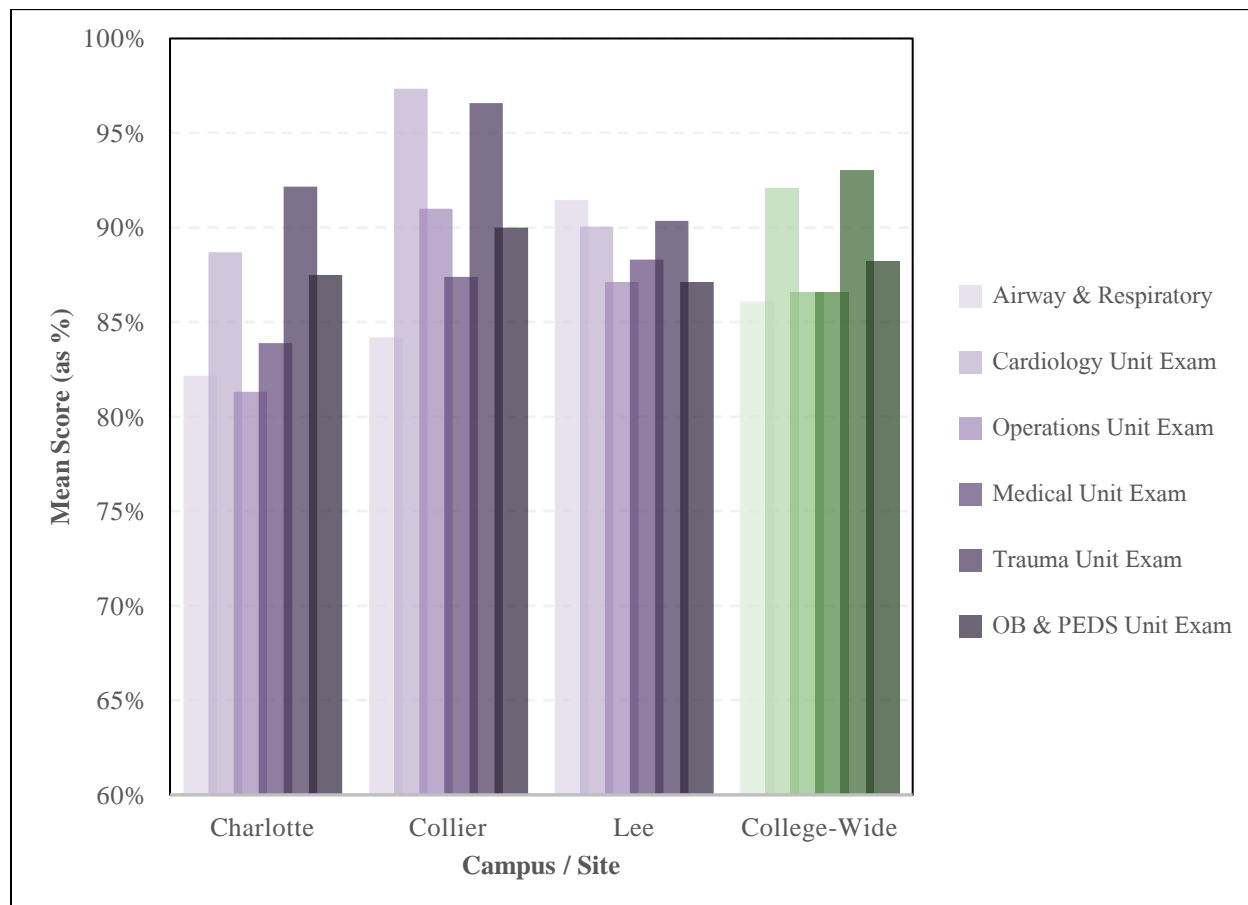


Figure 2. Comparison of mean scores (as %) by site.

2.3 LONGITUDINAL STUDY

Description of achievement over time in EMS 2119 is provided in Figure 3. Note that comparison from fall terms to spring terms is less useful as assessment reports across multiple course level and program level assessments at Florida SouthWestern State College typically exhibit substantial differences from fall to spring term and are better interpreted from fall-to-fall and spring-to-spring (see <http://www.fsw.edu/facultystaff/assessment/history> for further details). All areas appear to have stabilized following a recovery in AY 2020-21 after a drop in scores in AY 2019-20.

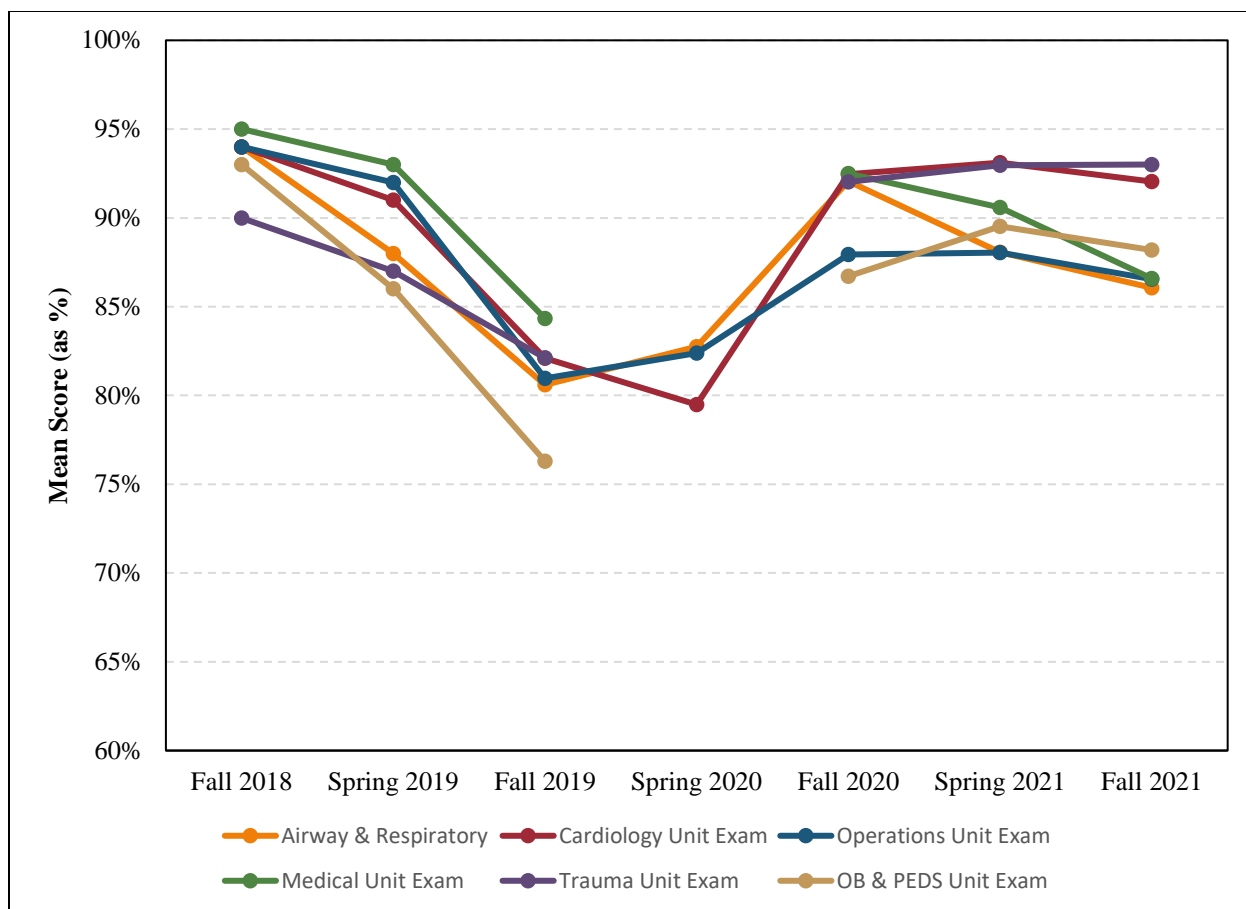


Figure 3. Comparison of exam mean score over time.

3 EMS 2661

The assessment for EMS 2661 tracks achievement in ACLS Certification, CPR Certification, and the PMD Internship Folder (#1, #2, and #3). A total of 17 students completed ACLS Certification and 18 completed CPR Certification from an enrollment of 19. Also, the mean score for the PMD Internship folder was 68.1 (max = 72).

4 CONCLUSIONS

FSW's Emergency Medical Services Program began a study in AY 2018-19 exploring comparative achievement in the Paramedic College Credit Certificate and the Emergency Medical Services AS Program. The study consists of course level assessments; one from a CCC/AS course (EMS 2119 *Fundamentals of Emergency Medical Care*) and the second from an AS specific course (EMS 2661 *Paramedic Field Internship*).

4.1 EMS 2119

A drill-down of EMS 2119 results are as follows:

1. During the Fall 2021 semester, an enrollment of 81 contributed to scores tallied from 3 of 3 sections of EMS 2119. Mean scores range from 87% to 93%. Trauma Unit exhibits the highest mean score at 93%.
2. 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. No variation in modalities is offered for this course, so no comparison study could be completed.
4. Of the 81 artifacts collected from EMS 2119, 26 for each exam originated from the Charlotte campus, 27 from the Collier campus, and 30 for each exam from the Thomas Edison (Lee) campus. The Collier campus exhibits the highest mean score in four of six of the exams followed by Lee, with two, and Charlotte, with zero.

4.2 EMS 2661

A drill-down of EMS 2661 results are as follows:

1. The assessment for EMS 2661 tracks achievement in ACLS Certification, CPR Certification, and the PMD Internship Folder (#1, #2, and #3). A total of 17 students completed ACLS Certification and 18 completed CPR Certification from an enrollment of 19. Also, the mean score for the PMD Internship folder was 68.1 (max = 72).