Kapi'olani Community College

Spring Enrollment Trends

On Campus and Online

June 2018

Research Brief

Issue 2018 - 06

Table of Contents

Definitions

Enrollment   Includes students registered to take at least one course at KCC

Full-time Status   12 or more credits attempted in a given semester

On-Campus Students   Enrolled in zero online classes in a given semester

Online Students   Enrolled in at least one online course in a given semester

Part-time Status   11 or fewer credits attempted in a given semester

Background

As part of its strategic plan, Kapiʻolani Community College emphasizes the need to "invest in distance education and information technology to improve learning outcomes, student success, and support services" (Strategic Directions, IV.O).

Since 2012, the Office for Institutional Effectiveness (OFIE) has evaluated the effect of online classes on the campus by interpreting data extracted from the University of Hawaiʻi Operational Data Store (ODS), as well as by surveying both students and instructors. This report is an extension of previous institutional research, including the January 2018 report *Online Courses and Enrollment Trends at Kapiʻolani Community College*.

The following should be noted for this particular report:

- Students enrolled at Kapiʻolani Community College
- Data collected for only spring semesters (2014-2018)
- Freeze event was six weeks after the end of the semester (EOS)

Previous reports are available on the OFIE website.

Findings & Interpretation: All Students ━━━━━

The rate of on-campus student enrollment is decreasing more quickly than it is for students taking at least one online class. Most KCC students will be enrolled in at least one online class by spring 2023.

figure 1

Kapiʻolani Community College spring semester enrollments continue to decrease
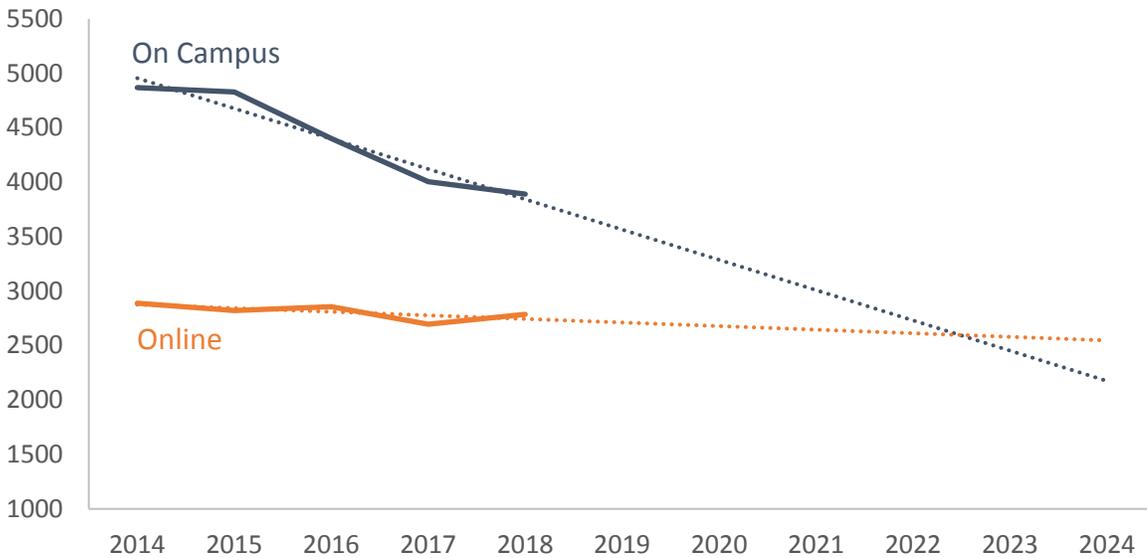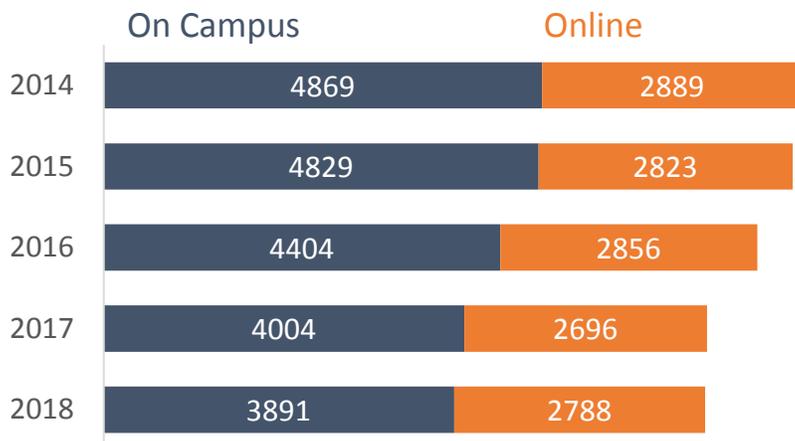

Prediction: Spring 2019 Total Enrollment

3,565 on-campus students | 2,712 online students

figure 2

Kapiʻolani Community College Spring Semester Enrollment Numbers

2018 Predictions vs Actual

On-Campus Students
3,770 Predicted
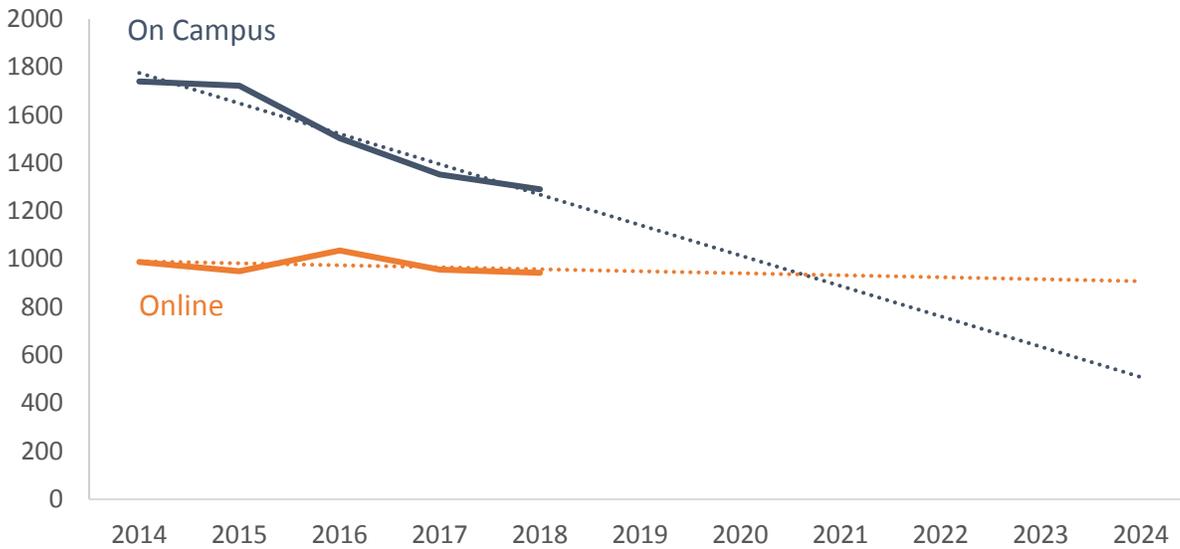3,891 Actual
3% Difference

Online Students
2,680 Predicted
2,788 Actual
4% Difference

Findings & Interpretation: Full-Time Students

Spring 2018 enrollment numbers for full-time students taking at least one online class were **below predicted values**. All other groups had higher numbers than predicted.

figure 3

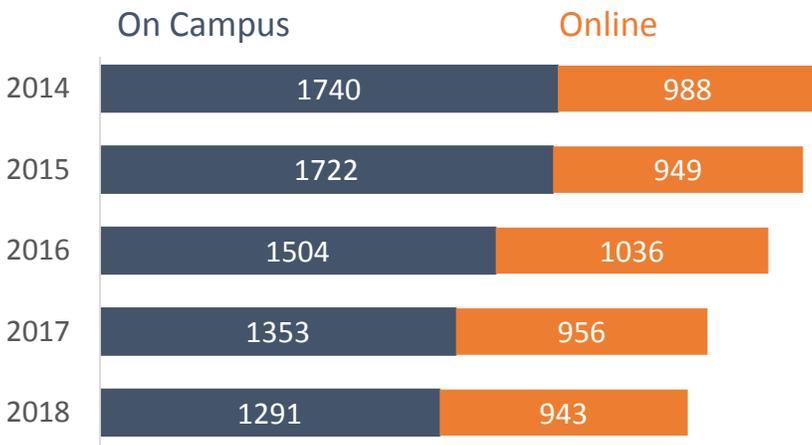## Most full-time students will take at least one online spring-term class by 2021

Prediction: Spring 2019 Full-Time Enrollment
1,142 on-campus students | 950 online students

figure 4

Kapiʻolani Community College Spring Semester Full-Time Enrollment Numbers

	On Campus	Online
2014	1740	988
2015	1722	949
2016	1504	1036
2017	1353	956
2018	1291	943

2018 Predictions vs Actual

On-Campus Students
1,235 Predicted
1,291 Actual
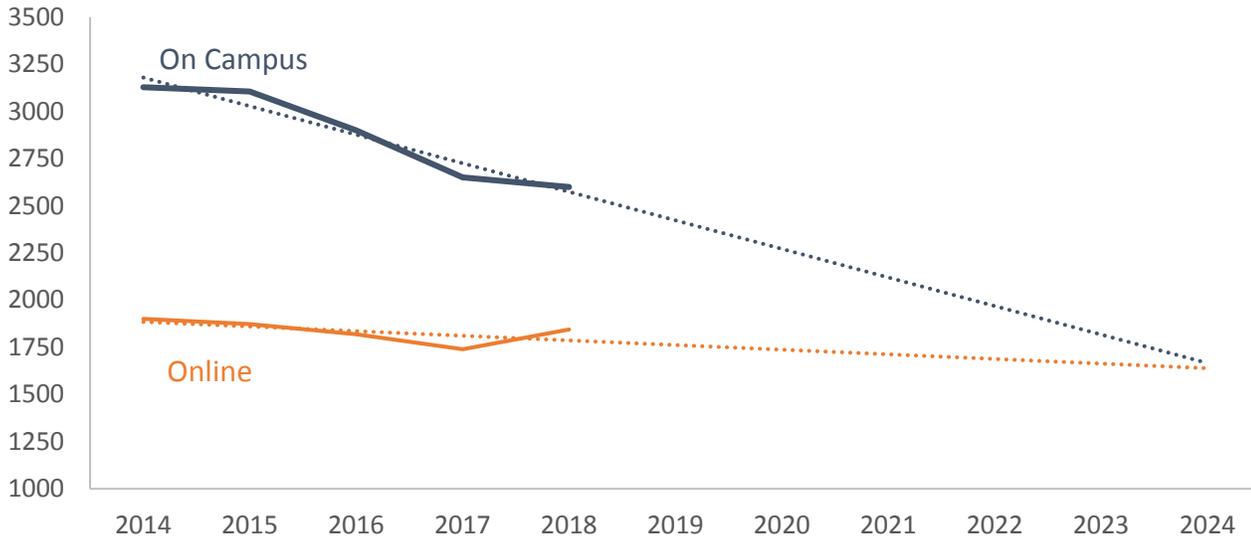5% Difference

Online Students
980 Predicted
943 Actual
4% Difference

Findings & Interpretation: Part-Time Students

The only subgroup to see an increase in spring semester enrollment were the part-time students taking at least one online class.

figure 5

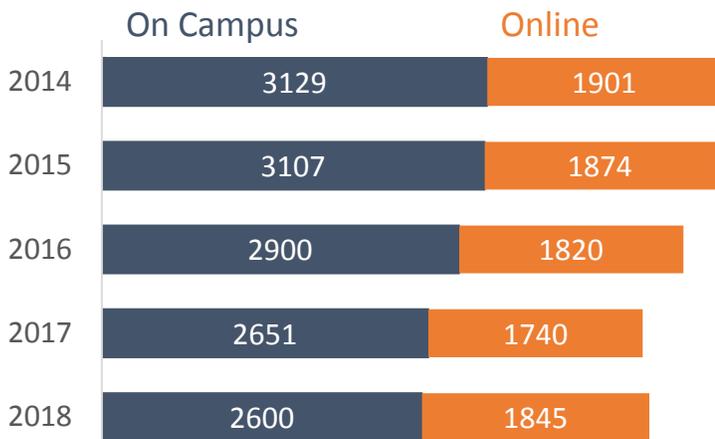**Most part-time KCC students will take a spring semester online class by 2024**

Prediction: Spring 2019 Part-Time Enrollment
2,423 on-campus students | 1,762 online students

figure 6

Kapiʻolani Community College Spring Semester Part-Time Enrollment Numbers

2018 Predictions vs Actual

On-Campus Students
2,537 Predicted
2,600 Actual
3% Difference

Online Students
1,700 Predicted
1,845 Actual
9% Difference

Points of Discussion

Measure Magnitude

Overall enrollments continue to decrease at Kapiʻolani Community College. All forecasting equations reflect this negative trend. When looking at enrollment vectors, magnitude also needs to be considered. The rates of reduction for online student enrollment are at a much slower velocity than those for on-campus enrollment. Students are continuing to take online courses, so having the infrastructure in place to retain these students is essential.

Focus on Full Time

In spring 2018, the college outperformed its enrollment predictions in every subgroup with the exception of full-time online students. Transforming part-time students into full-time students through increased online learning opportunities is one viable solution to garner both campus and academic success by increasing graduations and transfers.

Add Adjustment Factors

The percentage difference between the spring 2018 predicted figures and the actual figures ranged from 3-9%. Once OFIE collects data for spring 2019, it can add adjustment factors to refine future predictions.

Learn Linear Regression

Dr. Robert Nau, Duke University professor emeritus, has shared a comprehensive overview of statistical forecasting. For a more complete understanding of the equations in Figure 8, view his *Notes on Linear Regression Analysis*.

Progress

Kapiʻolani Community College is influenced by external factors, including changes to both virtual and physical infrastructure. Throughout 2018 and 2019, renovations will affect building usage, class scheduling, and parking availability. OFIE will next study the outcomes of limited space on online student enrollment.

Summary Tables

Data Points: Kapiʻolani CC Enrollment for Spring Semesters 2014-2018

Spring Year	All Students		Full-Time Students		Part-Time Students	
	On Campus	Online	On Campus	Online	On Campus	Online
2014	4869	2889	1740	988	3129	1901
2015	4829	2823	1722	949	3107	1874
2016	4404	2856	1504	1036	2900	1820
2017	4004	2696	1353	956	2651	1740
2018	3891	2788	1291	943	2600	1845

Equations Used to Predict 2019 Enrollment

Status	Location	Equation	R^2 Value	Outcome
All Students	On Campus	$y = -278.1x + 5233.7$	0.9433	3565
	Online	$y = -32.9x + 2909.1$	0.4919	2712
Full-Time	On Campus	$y = -126.7x + 1902.1$	0.9456	1142
	Online	$y = -8.3x + 999.3$	0.1158	950
Part-Time	On Campus	$y = -151.4x + 3331.6$	0.9366	2423
	Online	$y = -24.6x + 1909.8$	0.3976	1762

Contact

Kara Plamann Wagoner

Institutional/Policy Analyst

Office for Institutional Effectiveness at Kapi`olani Community College

808.734.9778

karapw@hawaii.edu

Shaun Kiyabu

Institutional/Policy Analyst

Office for Institutional Effectiveness at Kapi`olani Community College

808.734.9763

kiyabus@hawaii.edu