National Environmental Health Science & Protection Accreditation Council

2019-2020 Update of Accredited Degree Programs

Compiled by

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2019-2020 Annual Update of EHAC Accredited Degree Programs Report Highlights

Accredited Degree Program Growth and Attrition

- Steady growth in the number of accredited Undergraduate (UG) and Graduate (G) Degree Programs has leveled since 2015, with a current total of 37 EHAC Accredited Degree Programs (28 Undergraduate and nine Graduate Degree Programs).
- A total of 58 UG and G Degree Programs have acquired accreditation and 21 UG and G Degree Programs have lost accreditation since 1969.

Undergraduate and Graduate Enrollment

- UG enrollment increased slightly from 2018 to 2020.
- Graduate enrollment continues to decline from a high point in 2016-2017. The loss Old Dominion University's EH program significantly impacted graduate enrollment numbers in 2019-2020.

Undergraduate and Graduate Graduation Rates

- UG graduation rates have remained fairly steady throughout the last fourteen years.
- Graduate graduation rates have increased steadily with a peak in 2016-2017. However, since 2017 there has been a fairly steady decline in Master's level graduates.

Undergraduate and Graduate Retention Rates

- The 12-year (2008-2020) average retention rate for UG students remained at 25%.
- The 12-year (2008-2020) average retention rate for Graduate students rose to 33%.

Undergraduate and Graduate On-Campus Recruitment Techniques

- UG Degree Programs again reported more on-campus recruitment success with face to face tools in 2019-2020.
- Graduate Degree Programs also experienced success with face to face tools, as well as Facebook interactions.

Undergraduate and Graduate Off-Campus Recruitment Techniques

- Similar to 2017-2018, UG Degree Programs were most successful in recruiting students off-campus by participating in career day events, using alumni recruiters and presenting to high school students.
- Graduate Degree Programs found the most success attending career day events, alumni networking and posting to Facebook.

1.0 Introduction

Each year Environmental Health (EH) Degree Programs accredited by the National Environmental Health Science and Protection Accreditation Council (EHAC) are required to complete an annual update survey. This survey covers topics which allow EHAC to better understand the health of individual Degree Programs, as well as the overall strengths of EHAC Accredited Degree Programs.

The data in this report represents responses from 37 of 37 EHAC accredited Undergraduate and Graduate Degree Programs. There are 28 Undergraduate Degree Programs and nine Graduate Degree Programs represented in this survey.

This report provides information on student and faculty diversity, the health of individual Degree Programs, student recruitment, enrollment and retention trends and graduation rates. Additionally, it includes information on faculty degree requirements, faculty salary information, international students, public vs. private sector employment rates of graduates and an assessment of their student recruitment strategies.

2.0 Current EHAC Accreditation Degree Program Origin and Reaccreditation Dates

Twenty-eight Undergraduate EH Degree Programs and nine Graduate Degree Programs were accredited by EHAC at the time of this data collection (Table 1). The period of accreditation is six years. Degree Programs begin their reaccreditation process the fall prior to the end date of their accreditation.

Table 1: Accredited Degree Programs - Accreditation Origin Date and Reaccreditation Schedule (Degree Programs eligible for 2021 reaccreditation are highlighted in blue)

	Institution	EHAC Accredited Undergraduate/ Graduate Degree Program	Next Reaccreditation Review - Year	Initial Accreditation Date - Year
1	Baylor University	Undergraduate	2022	2010
2	Benedict College	Undergraduate	2022	2004
3	Boise State University	Undergraduate	2024	1982
4	California State University, Northridge	Undergraduate	2026	1979
5	California State University, Northridge	Graduate	2026	1973
6	California State University at San Bernardino	Undergraduate	2025	2004
7	Central Michigan University	Undergraduate	Reassess in 2021	2013
8	Colorado State University	Undergraduate	2022	1973
9	East Carolina University	Undergrad	2024	1974
10	East Carolina University	Graduate	2024	1981
11	East Central University, Oklahoma	Undergraduate	Reassess in 2022	1975
12	East Tennessee State University	Undergraduate	2024	1969
13	East Tennessee State University	Graduate	2024	1977
14	Eastern Kentucky University	Undergraduate	2024	1985
15	Eastern Kentucky University	Graduate	2024	2012
16	Fort Valley State University	Graduate	2021	2015
17	Illinois State University	Undergraduate	2025	1977

	Institution	EHAC Accredited Undergraduate/ Graduate Degree Program	Next Reaccreditation Review - Year	Initial Accreditation Date - Year
18	Indiana University- Purdue University Indianapolis	Undergraduate	2025	2006
19	Mississippi Valley State University	Undergraduate	2022	1997
20	Mississippi Valley State University	Graduate	2024	2005
21	Missouri Southern State University	Undergraduate	2026	1996
22	Montana State University	Undergraduate	2025	2019
23	North Carolina Central University	Undergraduate	2023	2017
24	Ohio University	Undergraduate	2022	1992
25	Old Dominion University	Undergraduate	2026	1983
26	State University of New York, School of Environmental Science and Forestry	Undergraduate	2021	2017
27	Texas Southern University	Undergraduate	2025	2006
28	University of Findlay	Undergraduate	2024	2012
29	University of Findlay	Graduate	2024	2005
30	University of Georgia, Athens	Undergraduate	2024	1984
31	University of Illinois, Springfield	Graduate	2024	2006
32	University of Washington	Undergraduate	2023	1976
33	University of Wisconsin Eau Claire	Undergraduate	2023	1975
34	University of Wisconsin Oshkosh	Undergraduate	2025	2013
35	West Chester University	Undergraduate	2026	2008
36	Western Carolina University	Undergraduate	2023	1984
37	Western Kentucky University	Graduate	2025	2019

Chart 1 presents the historic trend in number of accredited Undergraduate and Graduate Degree Programs from EHAC's first accreditation decision in 1969, to the present. Undergraduate Degree Program numbers show an overall increase from 1969 to 2020, although there was a loss of programs in 2011. Since 1969, eighteen Undergraduate Degree Programs have lost accreditation, while forty-six Undergraduate Degree Programs have gained accreditation (Chart 2). Graduate Degree Programs have steadily risen as well, since 1971, plateauing at a high of nine since 2011. One Graduate Degree Program lost accreditation and one gained accreditation in 2019 (Chart 2).

Chart 1
Total Number of Accredited Undergraduate and Graduate Programs from 1969-2020

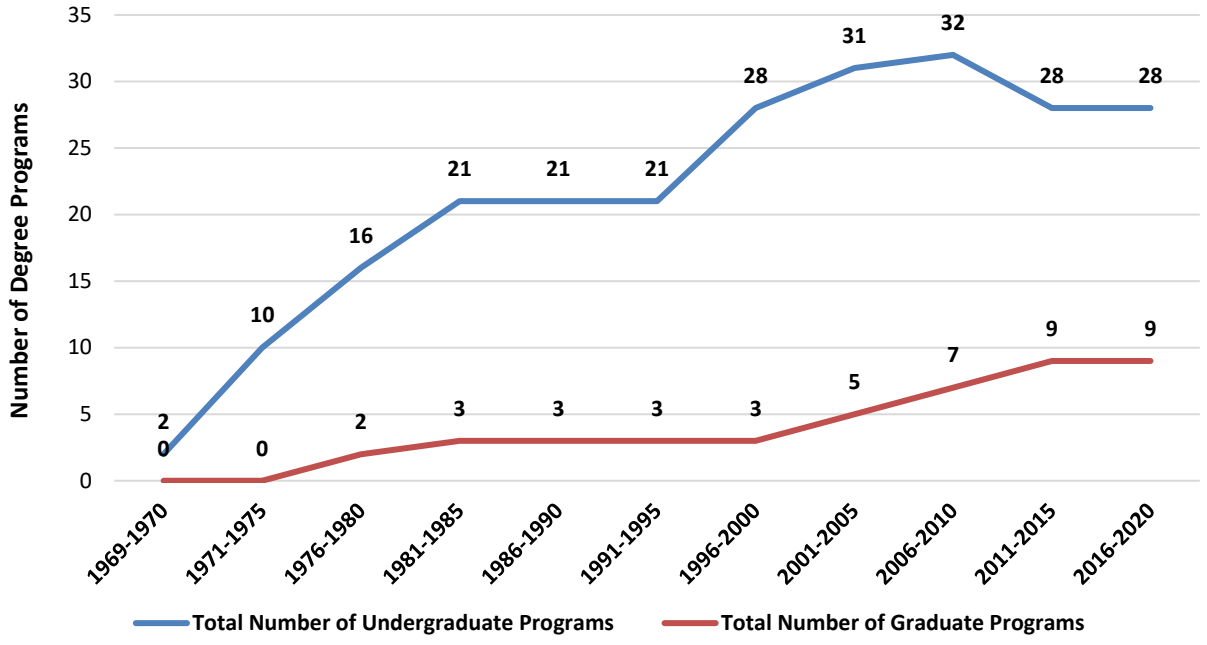
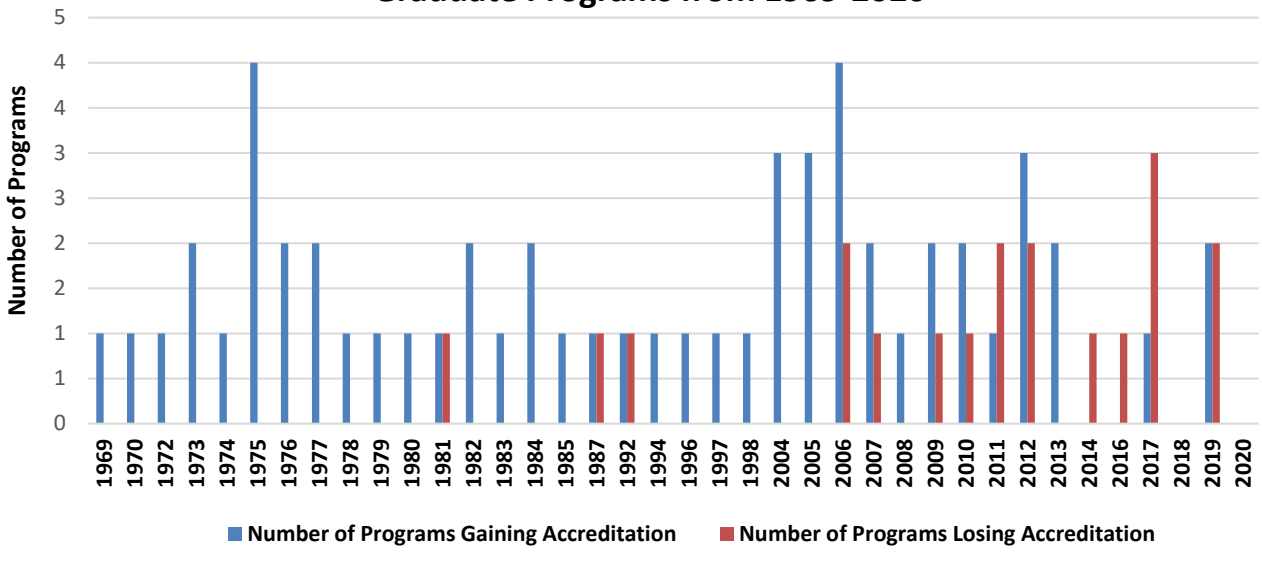


CHART 2
Initial Accreditation and Accreditation Loss of Undergraduate and Graduate Programs from 1969-2020



3.0 Degree Program Faculty Updates and Information

3.1 Number of Faculty within Accredited Degree Programs

This year, 2019-2020, a total of 459 faculty members were reported by Undergraduate and Graduate Degree Programs, compared with 363 reported in 2018-2019 (Tables 2 and 3). This reflects significant growth in Undergraduate ancillary and part-time faculty. Graduate full time and ancillary/part-time numbers reversed themselves this year with the majority of Graduate faculty being reported as full time employees. Chart 3 presents trends in Undergraduate and Graduate full and part-time faculty during the last nine years.

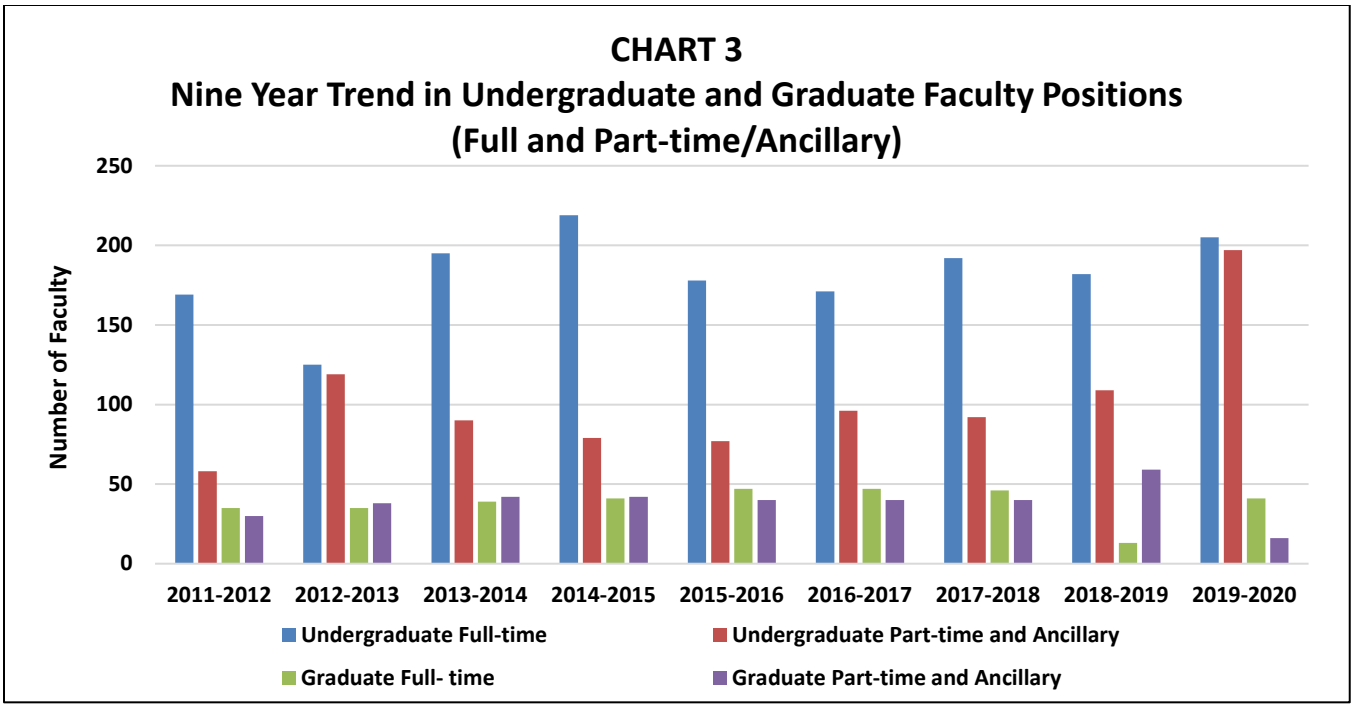
Table 2: Faculty Teaching at Undergraduate EHAC Accredited Degree Programs

University Name	2019-2020 Full Time	2019-2020 Part Time	2019-2020 Ancillary	2019-2020 Total
Baylor University	8	0	1	9
Benedict College	3	0	1	4
Boise State College	5	0	1	6
California State University Northridge	5	16	0	21
California State University San Bernardino	1	6	0	7
Central Michigan University	14	2	0	16
Colorado State University	15	0	0	15
East Carolina University	7	1	0	8
East Central University	3	0	0	3
East Tennessee State University	5	0	5	10
Eastern Kentucky University	5	2	0	7
Illinois State University	4	0	1	5
Indiana University - Purdue University Indianapolis	6	0	10	16
Mississippi Valley State University	3	0	2	5
Missouri Southern State University	3	1	0	4
Montana State University	30		0	30
North Carolina Central University	6	0	7	13
Ohio University	1	1	3	5
Old Dominion University	3	0	7	10
State University of New York, ESF	18	0	3	21
Texas Southern University	4	0	0	4
University of Findlay	6	0	3	9
University of Georgia, Athens	9	0	2	11
University of Washington	30	10	98	138

University Name	2019-2020 Full Time	2019-2020 Part Time	2019-2020 Ancillary	2019-2020 Total
University of Wisconsin Eau Claire	1	6	0	7
University of Wisconsin Oshkosh	2	3	0	5
West Chester University	3	0	1	4
Western Carolina University	5	0	4	9
Total	**205**	**48**	**149**	**402**

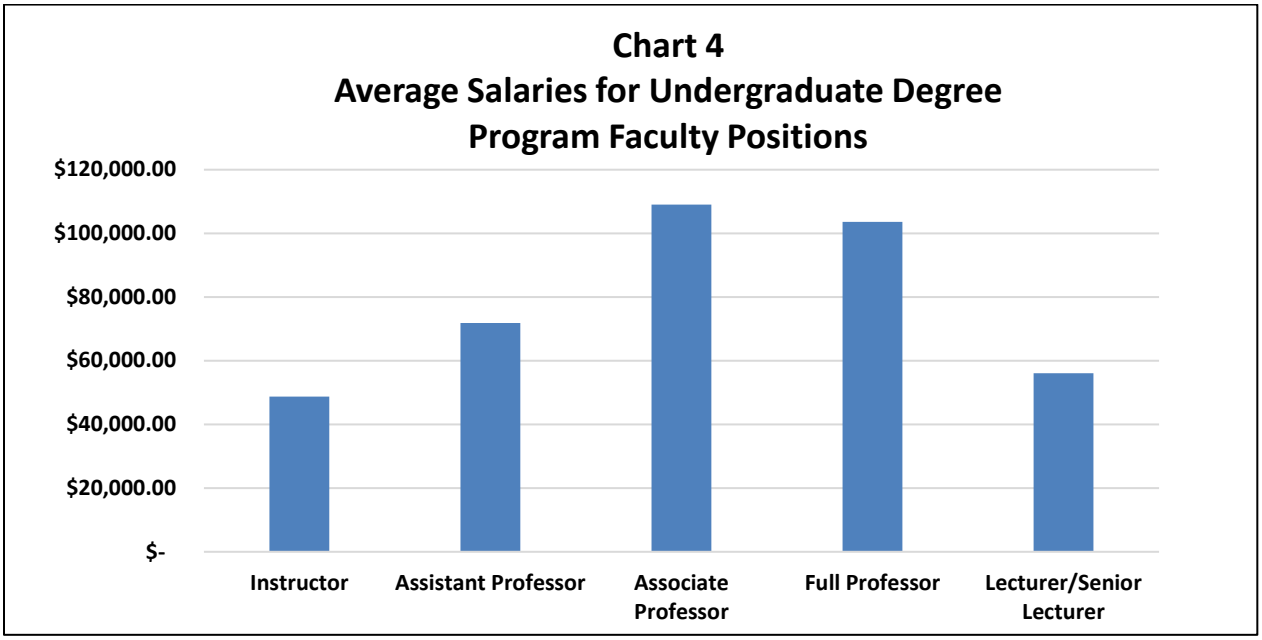
Table 3: Faculty Teaching at Graduate EHAC Accredited Degree Programs

University Name	2019-2020 Full Time	2019-2020 Part Time	2019-2020 Ancillary	2019-2020 Total
California State University Northridge	4	3	0	7
East Carolina University	5	4	0	9
East Tennessee State University	5	0	5	10
Eastern Kentucky University	5	1		6
Fort Valley State University	3	0	0	3
Mississippi Valley State University	3	0	2	5
University of Findlay	6	0	0	6
University of Illinois, Springfield	3	0	0	3
Western Kentucky University	7		1	8
Total	**41**	**8**	**8**	**57**



3.2 Salary Information

Degree Programs were invited to report average salaries for both junior and senior faculty (Charts 4 and 5) Undergraduate trends in faculty salaries were on a pretty steady rise beginning in 2013-2014, however, experienced a drop in 2018-2019 that carried into the present. Senior faculty experienced a similar increase over the past several years but also recorded a drop in 2018-2019 that reversed in 2019-2020.



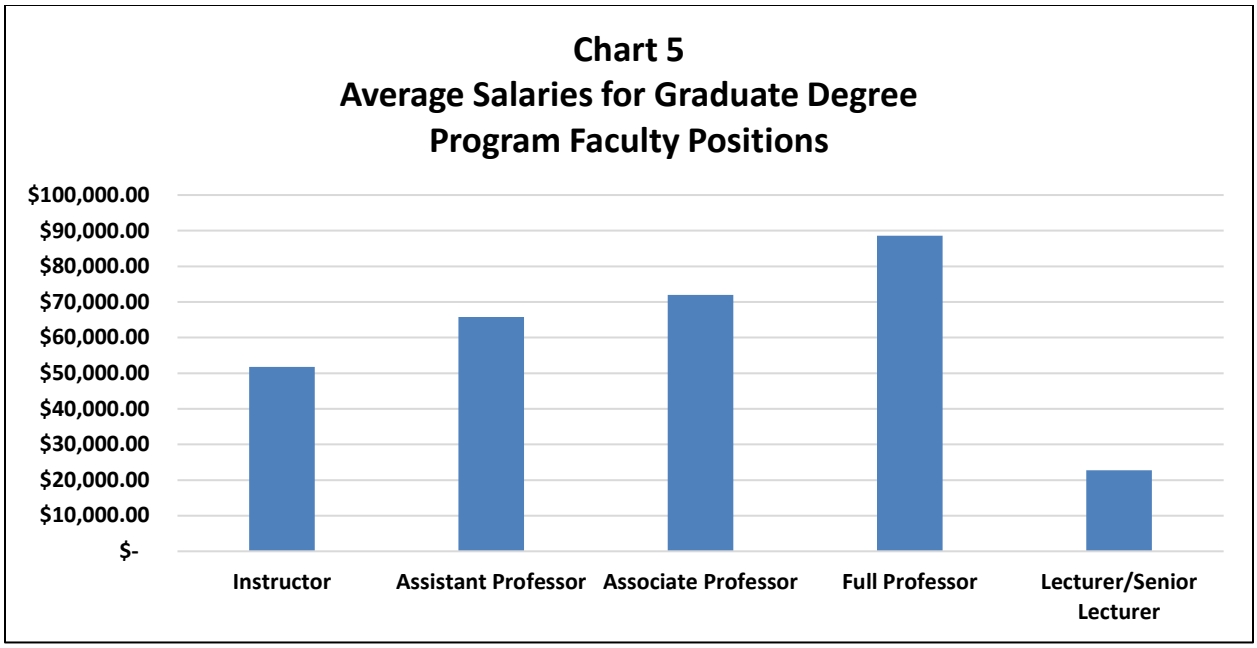


Chart 5
Average Salaries for Graduate Degree Program Faculty Positions
$100,000.00
$90,000.00
$80,000.00
$70,000.00
$60,000.00
$50,000.00
$40,000.00
$30,000.00
$20,000.00
$10,000.00
$-
Instructor
Assistant Professor
Associate Professor
Full Professor
Lecturer/Senior Lecturer

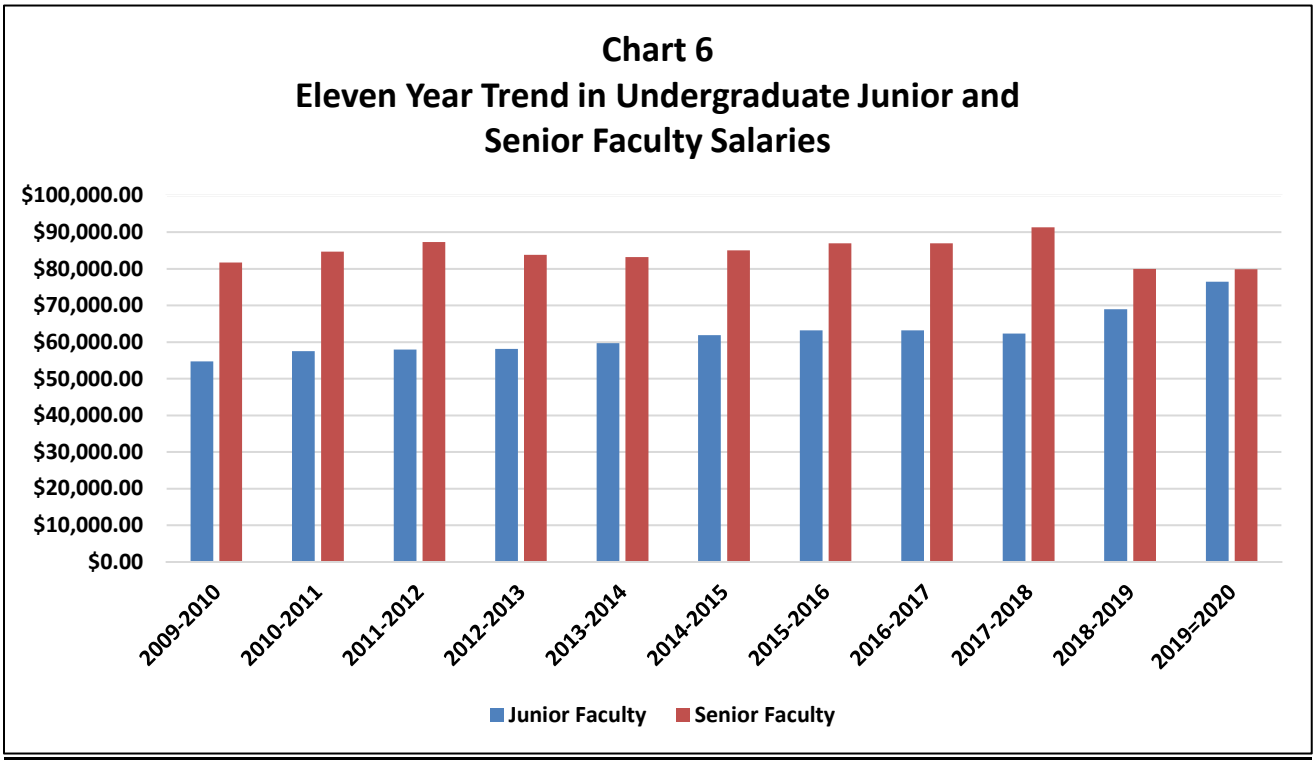
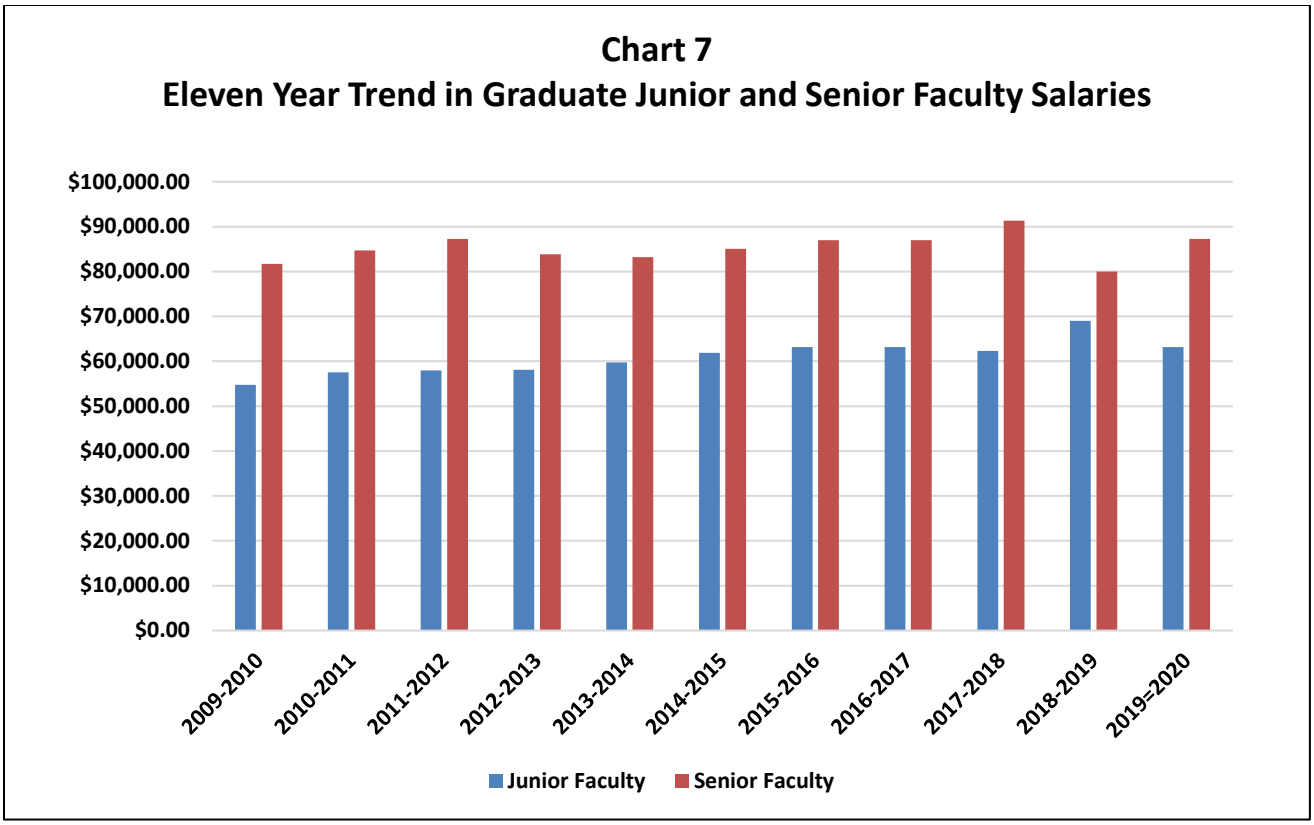


Chart 6
Eleven Year Trend in Undergraduate Junior and Senior Faculty Salaries
$100,000.00
$90,000.00
$80,000.00
$70,000.00
$60,000.00
$50,000.00
$40,000.00
$30,000.00
$20,000.00
$10,000.00
$0.00
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019=2020
Junior Faculty
Senior Faculty



3.3 Faculty Experience

Tables 4 and 5 identify the levels of EH practitioner-based experience of faculty teaching in Undergraduate and Graduate EHAC accredited EH Degree Programs in 2019-2020. While Undergraduate experience levels remained similar for those with at least some EH experience, the numbers of faculty with no EH experience rose significantly in 2019-2020. Conversely, the majority (64%) of Graduate Degree Program faculty have 5 plus years of experience, while the number of Graduate faculty with no EH experience fell this year.

Chart 8 presents trends in Undergraduate faculty experience during the last eleven years. The graph shows an overall steady climb, with fluctuations in the number of faculty with 5 years or more of experience. However, there has also been a steep upward trend in Undergraduate faculty with no experience and increased again in 2019-2020. Undergraduate faculty with one year or less of experience have remained steady with small fluctuations in those with lesser amounts of experience.

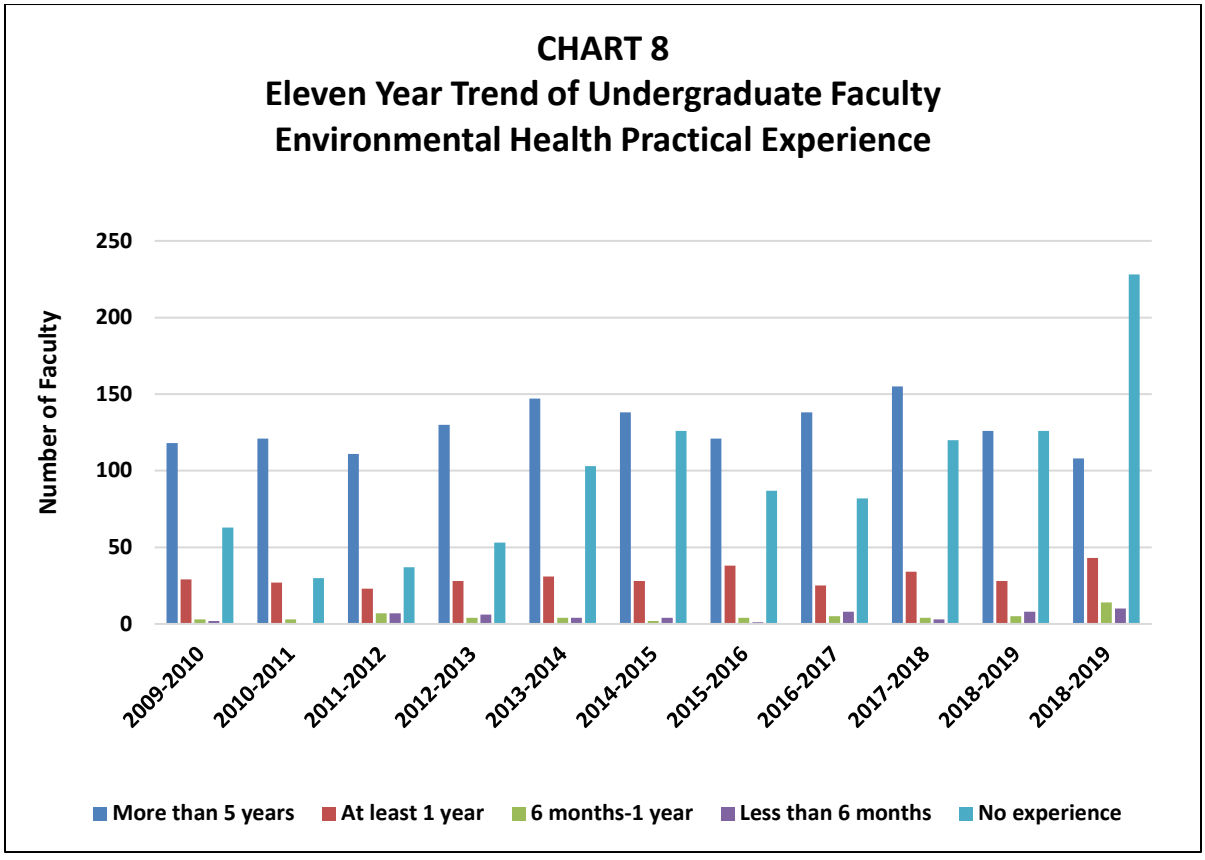
Eleven year trends in Graduate faculty experience levels appear in Chart 9. While, historically, a significant majority of Graduate faculty have had more than 5 years of practical experience, there was a marked increase in the amount of experienced faculty from 2011 to 2014. This experience level rose from 2013-2014, decreased until 2017, with a slight decline reported in 2017-2018, which continued in 2018-2019. Graduate faculty with no experience fluctuated a great deal from 2009-2010 to 2014-2015 but has remained steady at around 10-12% since 2015. Graduate faculty with at least a year of practical experience have been on the rise since a low of 6% in 2012-2013 and a return to 6% in 2016-2017. Faculty with at least one year of experience increased in 2019 2020, after a decline in 2018-2019.

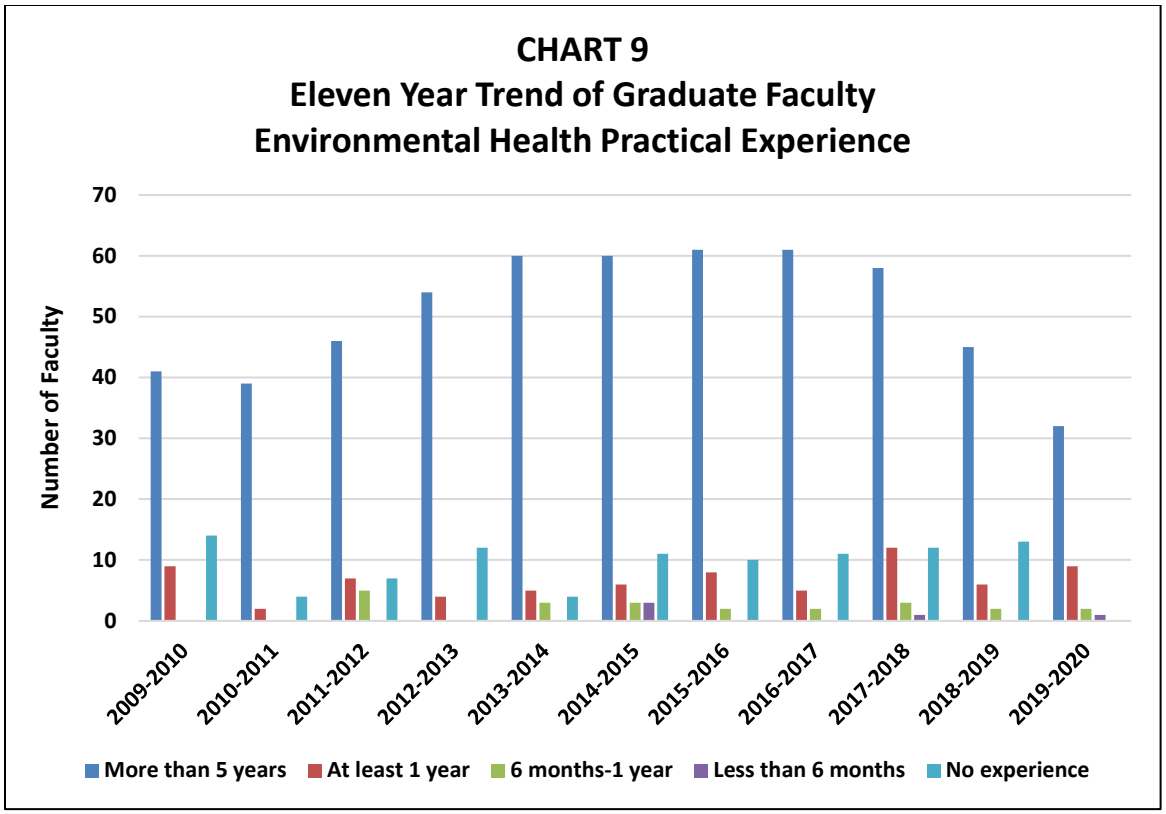
Table 4: Undergraduate Faculty Experience – 2019-2020

EH Based Practitioner Based Experience	Number of Faculty	% with Practical Experience
More than 5 years	108	27%
At least 1 year	43	11%
6 months-1 year	14	3%
Less than 6 months	10	3%
No experience	228	56%
Total (reported)	403	

Table 5: Graduate Faculty Experience – 2019-2020

Experience	Number of Faculty	% with Practical Experience
More than 5 years	32	64%
At least 1 year	9	18%
6 months-1 year	2	4%
Less than 6 months	1	2%
No experience	6	12%
Total (Reported)	50	





3.4 Faculty Requirements

Degree Programs were asked to report the preferred degree for their Undergraduate and Graduate faculty. Chart 10 shows that the vast majority of current Undergraduate and Graduate Degree Programs require faculty to have at least a Doctoral Degree. EH related experience is not generally considered in the hiring of either Undergraduate or Graduate faculty.

Chart 11 presents eleven-year trends in whether a terminal degree is required for Undergraduate faculty positions. The percent of Undergraduate Degree Programs requiring a terminal degree has risen sharply since 2012-2013, with a high of 83% in 2016-2017. 2019-2020 saw a rise in the number of Degree Programs requiring a termial degree.

Chart 12 presents eleven-year trends in terminal degree requirements for Graduate Degree Program faculty. Terminal degrees have been required throughout the last nine years with an overall increase in the number of Graudate Degree Programs requiring a terminal degree since 2012-2013. 2019-2020 numbers reflect a very slight decrease in the precent of Graudate Degree Programs requiring terminal degrees (Chart 12).

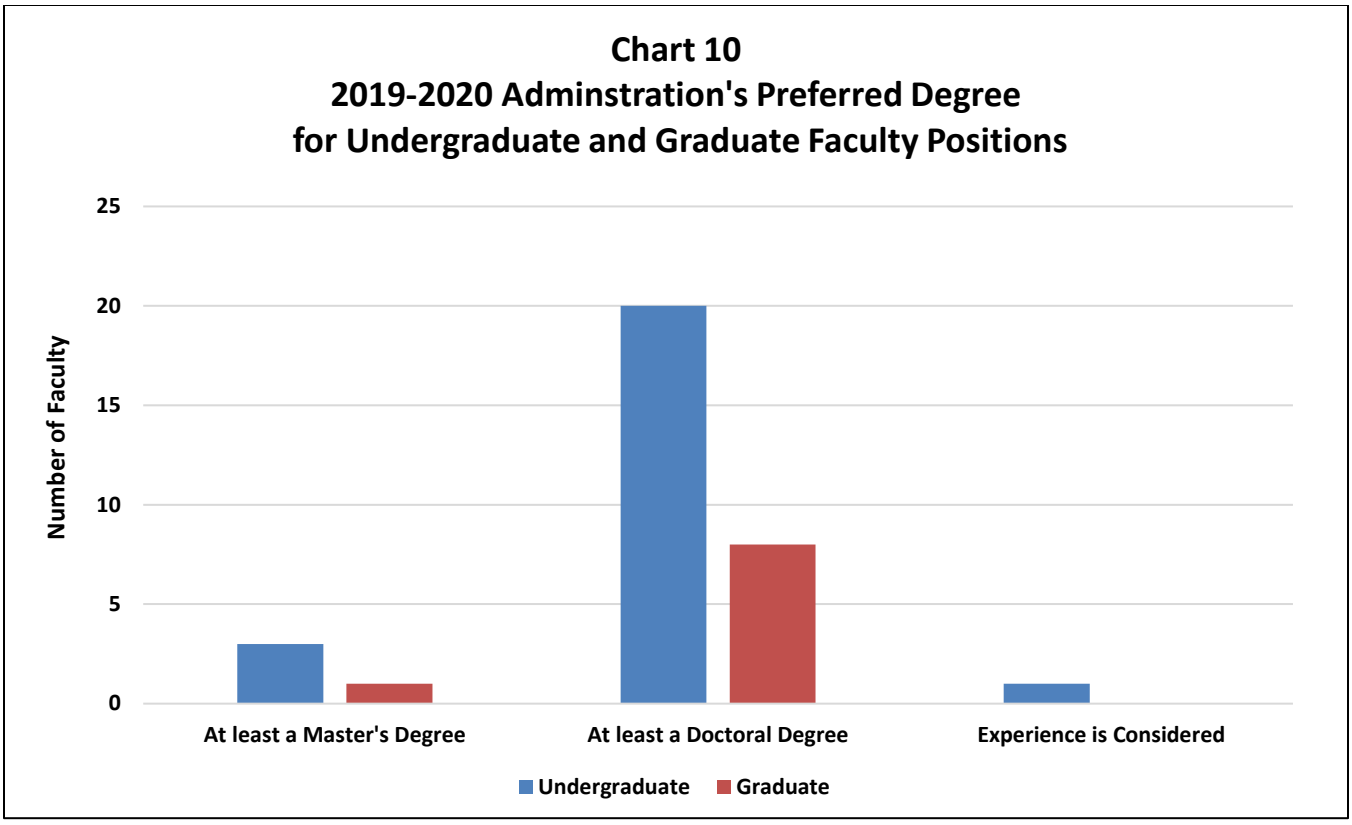


Chart 10
2019-2020 Adminstration's Preferred Degree
for Undergraduate and Graduate Faculty Positions
Number of Faculty
25
20
15
10
5
0
At least a Master's Degree
At least a Doctoral Degree
Experience is Considered
Undergraduate
Graduate

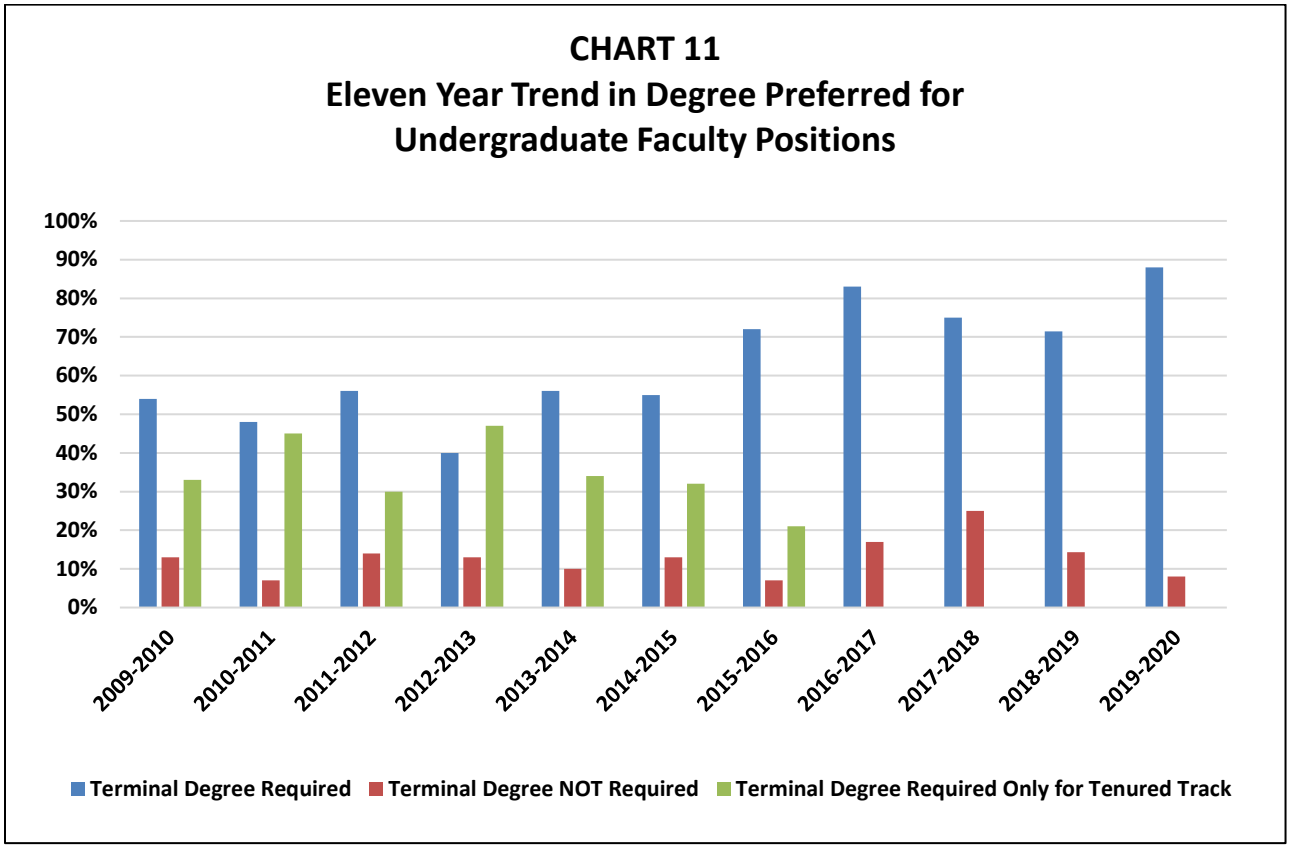
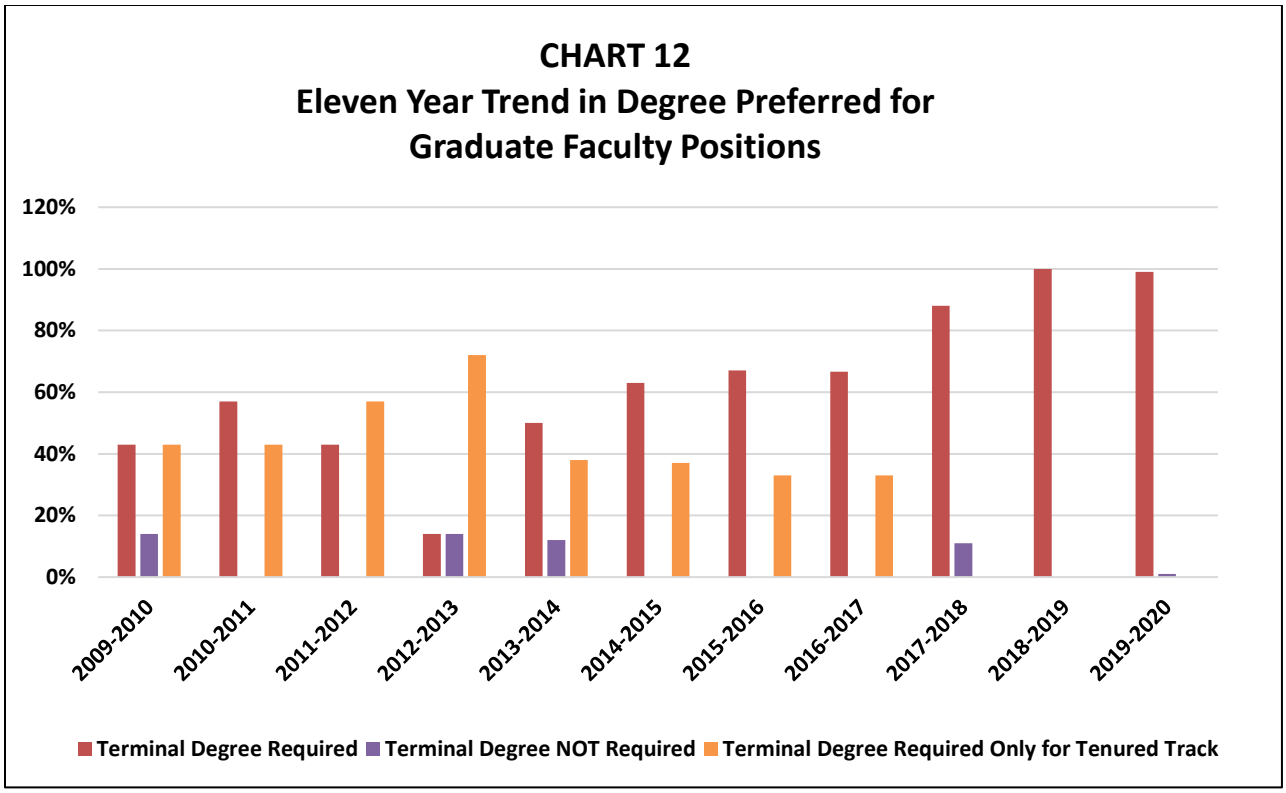


CHART 11
Eleven Year Trend in Degree Preferred for
Undergraduate Faculty Positions
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
Terminal Degree Required
Terminal Degree NOT Required
Terminal Degree Required Only for Tenured Track



3.5 Faculty Diversity

Chart 13 shows current faculty diversity in Undergraduate and Graduate Degree Programs. Current diversity levels reflect historic diversity trends. Trends in Undergraduate and Graduate faculty diversity are shown in Charts 14 and 15. African Americans and Asians make up the majority of the diverse faculty teaching at EHAC Accredited Degree Programs. These populations are followed by Hispanic faculty. [Note: No diversity data was available from one Graduate Degree Program for 2016-2017].

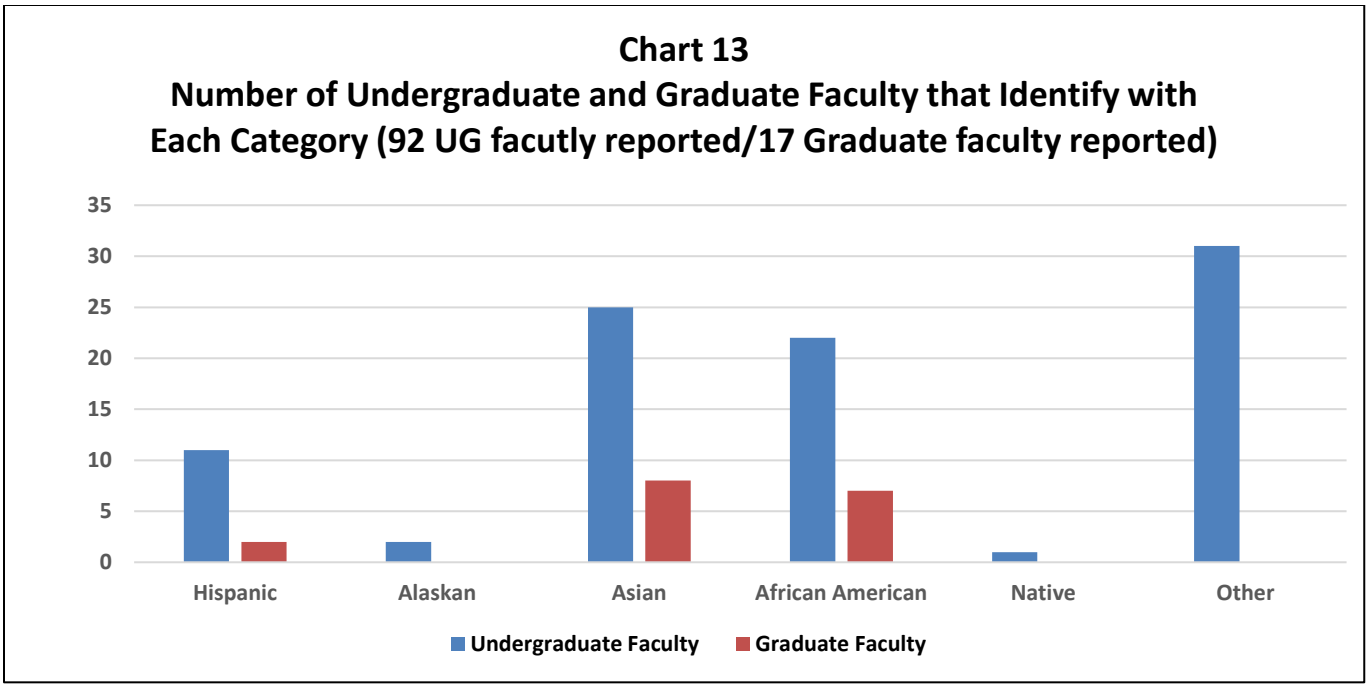


Chart 13
Number of Undergraduate and Graduate Faculty that Identify with Each Category (92 UG facutly reported/17 Graduate faculty reported)
35
30
25
20
15
10
5
0
Hispanic
Alaskan
Asian
African American
Native
Other
Undergraduate Faculty
Graduate Faculty

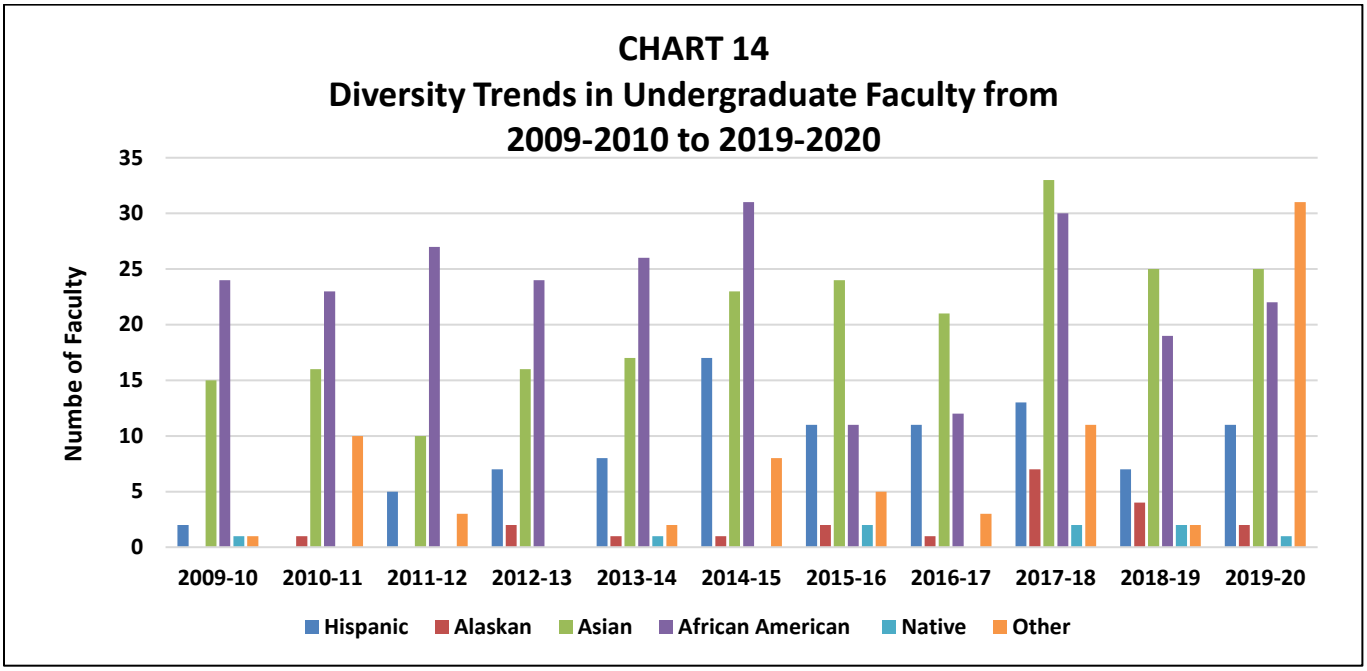
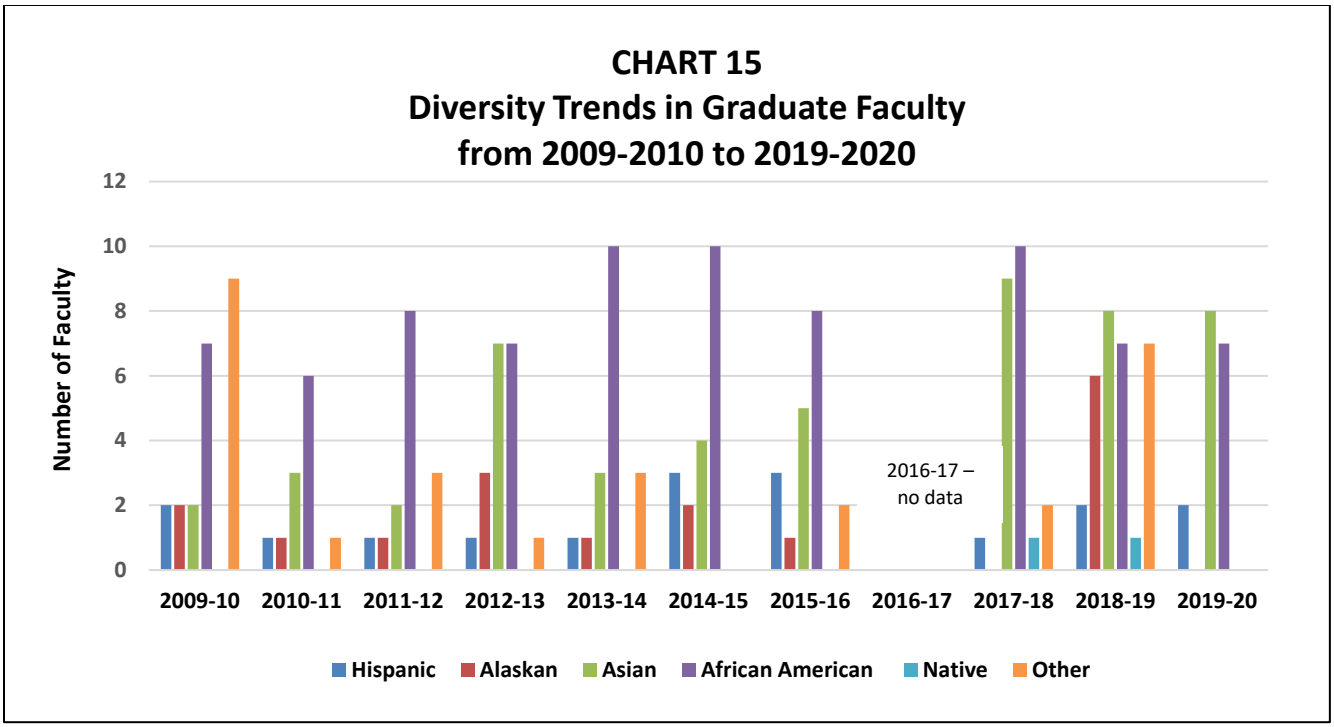


CHART 14
Diversity Trends in Undergraduate Faculty from 2009-2010 to 2019-2020
Numbe of Faculty
35
30
25
20
15
10
5
0
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
Hispanic
Alaskan
Asian
African American
Native
Other



3.6 Faculty Gender

Males make up the majority of EH faculty in accredited Undergraduate and Graduate Degree Programs. Chart 16 shows the gender breakdown of faculty teaching at Undergraduate and Graduate Accredited Degree Programs in 2019-2020. [Note: the 2020-2021 Survey will include broader gender options.]

Chart 17 shows that while males have historically outnumbered females in the faculty arena, female faculty numbers show increases in 2014-15, 2017-2018, and 2019-2020. 2019-2020 shows increases in both UG male and female faculty, however, male faculty significantly outnumber female UG faculty. Male Graduate faculty resumed their historically higher trend in 2019-2020 after a brief switch in 2018-2019. Paradoxically, the historic gender trend in Undergraduate Degree Programs shows more female than male students in all years except 2008-2009.

Graduate faculty gender numbers for males have remained steady with a slight increase, while a decrease in male Graduate faculty occurred between 2018 and 2019 and through the present (Chart 17). The number of female Graduate faculty has experienced and overall increase from 2009-2019, dropping slightly in 2019-2020.

Chart 16
Gender Distribution of Undergraduate and Graduate Faculty
(Total of 441 UG Faculty/57 Graduate Faculty Reported)

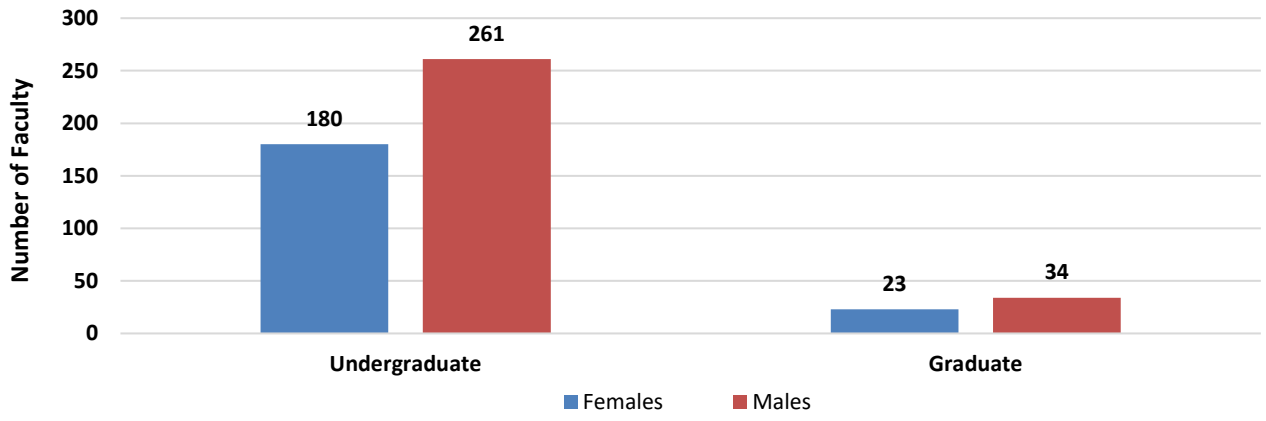
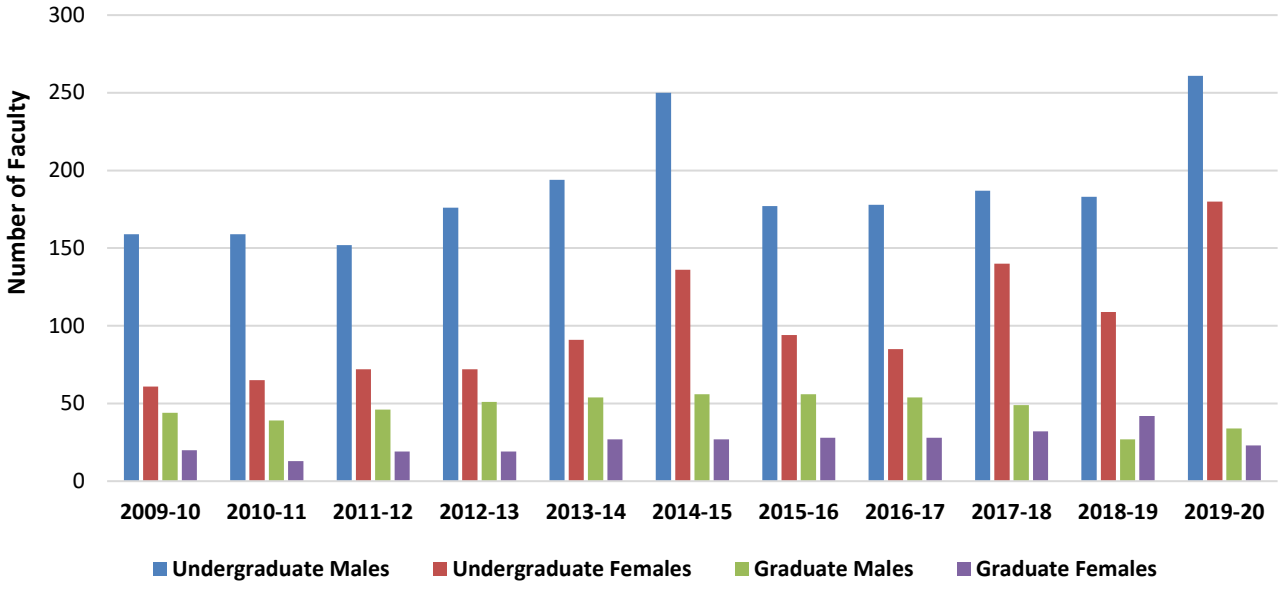


CHART 17
Gender Distribution Trends for Undergraduate and Graduate Faculty from 2009-2010 to 2019-2020



4.0 Enrollment & Graduation

4.1 Undergraduate Enrollment and Graduation

Enrollment increased slightly, from 2018-2019 to 2019-2020.

This year's Undergraduate graduation rate declined again from 2018-2019. Chart 18 shows the 12-year enrollment and graduation trends for Accredited Environment Health Degree Programs. (The 2019-2020 number is based on Degree Program Directors estimating how many students will graduate 5 months before spring graduation).

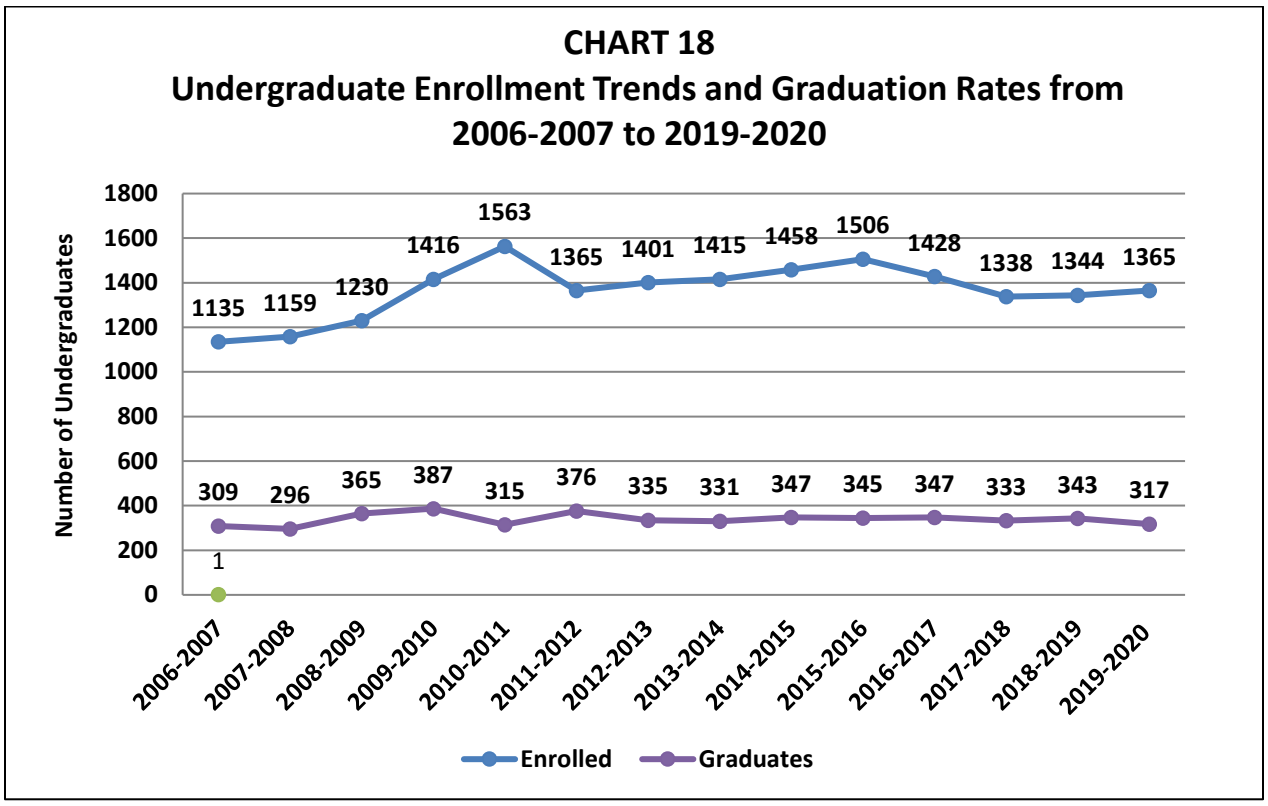


Table 6 illustrates the difference in individual accredited Degree Program enrollment from the academic year 2018-2019 to academic year 2019-2020. Table 6 shows that Undergraduate enrollment increased in fourteen Degree Programs, decreased in ten Degree Programs, and was maintained at four Degree Programs. Two Graduate Degree programs experienced growth in enrollment from 2018-2019 to 2019-2020.

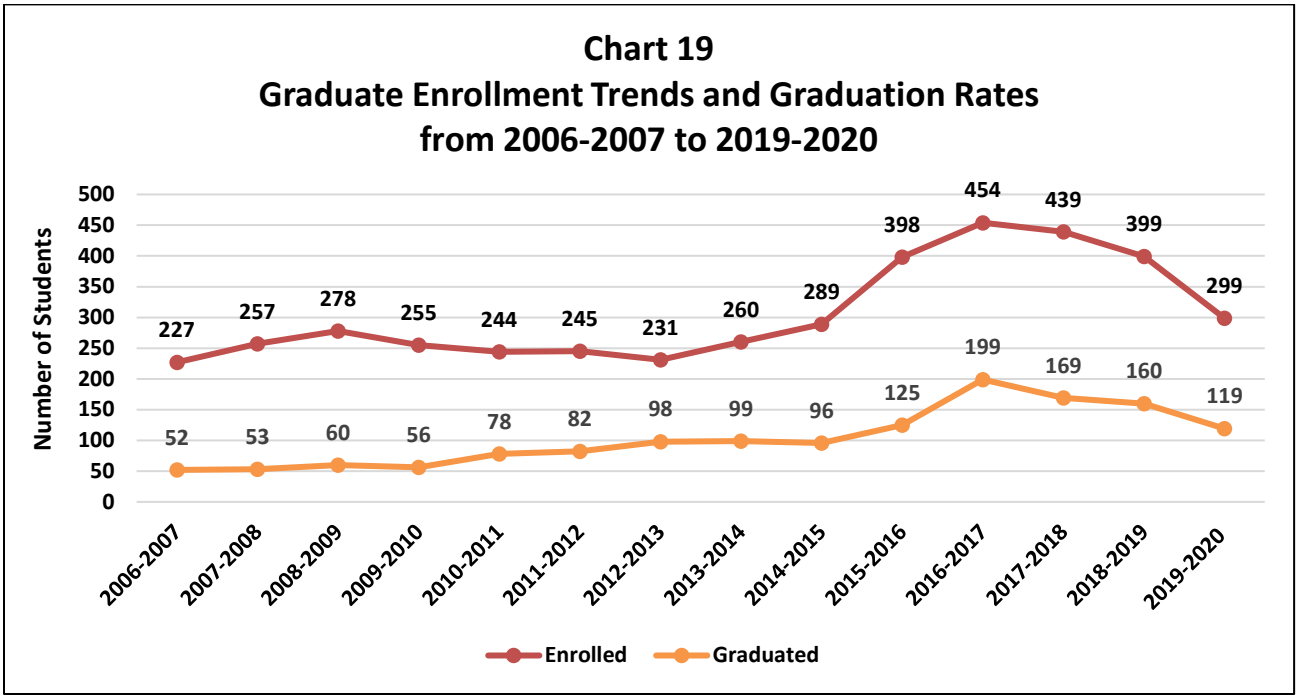
Table 6: Enrollment Comparison between Academic Years 2018-2019 and 2019-2020

Undergraduate Degree Programs	2018-2019 Enrollment	2019-2020 Enrollment	Difference
Baylor University	23	20	-3
Benedict College	17	20	3
Boise State College	39	21	-18
California State University Northridge	180	223	43
California State University San Bernardino	55	56	1
Central Michigan University	13	11	-2
Colorado State University	65	67	2
East Carolina University	25	40	15
East Central University	45	52	7
East Tennessee State University	32	32	0
Eastern Kentucky University	100	102	2
Illinois State University	73	59	14
Indiana University - Purdue University	10	9	-1
Mississippi Valley State University	30	29	-1
Missouri Southern State University	69	41	-28
Montana State University	0	20	20
North Carolina Central University	3	3	0
Ohio University	22	22	0
Old Dominion University	73	60	-13
State University of New York, ESF	43	47	4
Texas Southern University	35	25	-10
University of Findlay	49	56	7
University of Georgia, Athens	98	104	6
University of Washington	59	59	0
University of Wisconsin Eau Claire	37	45	8
University of Wisconsin Oshkosh	15	14	-1
West Chester University	58	48	-10
Western Carolina University	76	65	-11
Total	1341	1350	
Graduate Degree Programs	**2018-2019 Enrollment**	**2019-2020 Enrollment**	**Difference**
California State University Northridge	34	30	-4
East Carolina University	22	20	-2
East Tennessee State University	2	1	-1
Eastern Kentucky University	53	20	-33

Fort Valley State University	138	77	-61
Mississippi Valley State University	14	8	-6
Old Dominion University	16	0	-16
University of Findlay	95	95	0
University of Illinois, Springfield	25	29	4
Western Kentucky University	0	19	19
Total	399	299	

4.2 Graduate Enrollment and Graduation

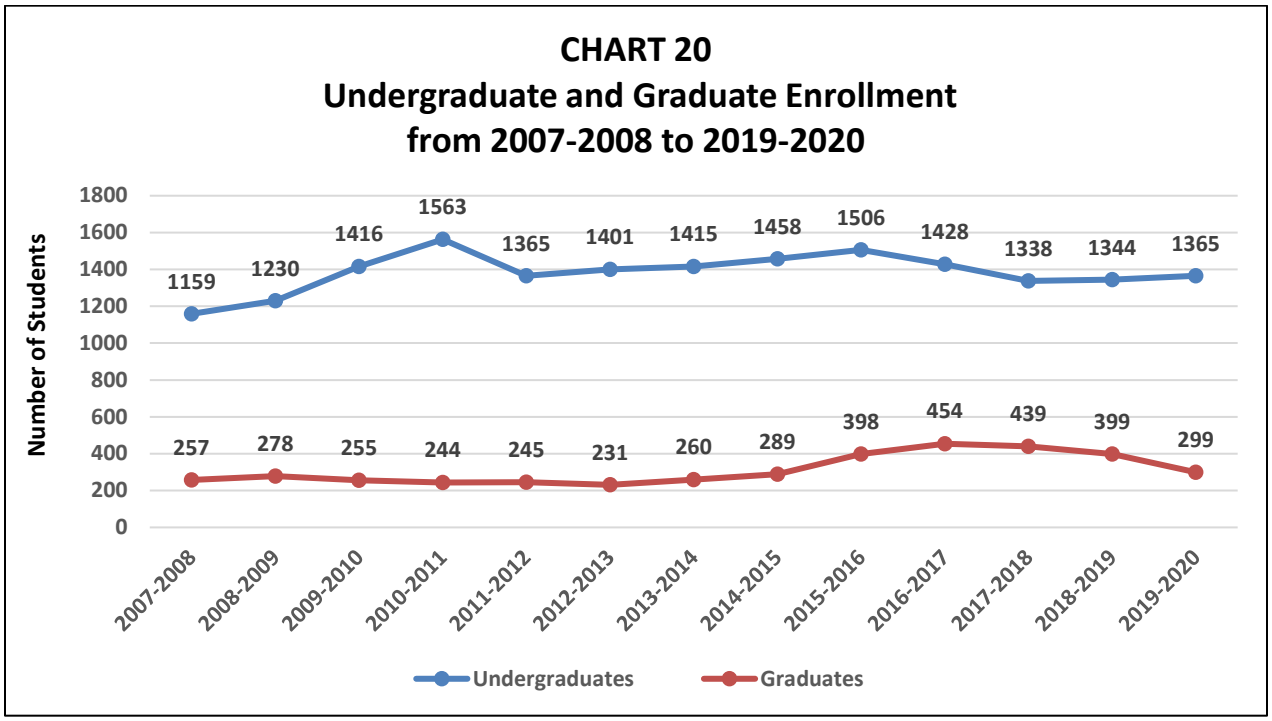
For the 2019-2020 academic year, Graduate enrollment decreased by 110 students. The Graduate graduation rate also declined from 160 to 119 Graduates. Chart 19 presents enrollment and graduation trends for Graduates during the past decade. Again, this decline, in part, reflects the loss of the Graduate Degree Program at Old Dominion University. (The 2019-2020 graduate number is based on Degree Program directors estimating how many students will Graduate 5 months before graduation.)

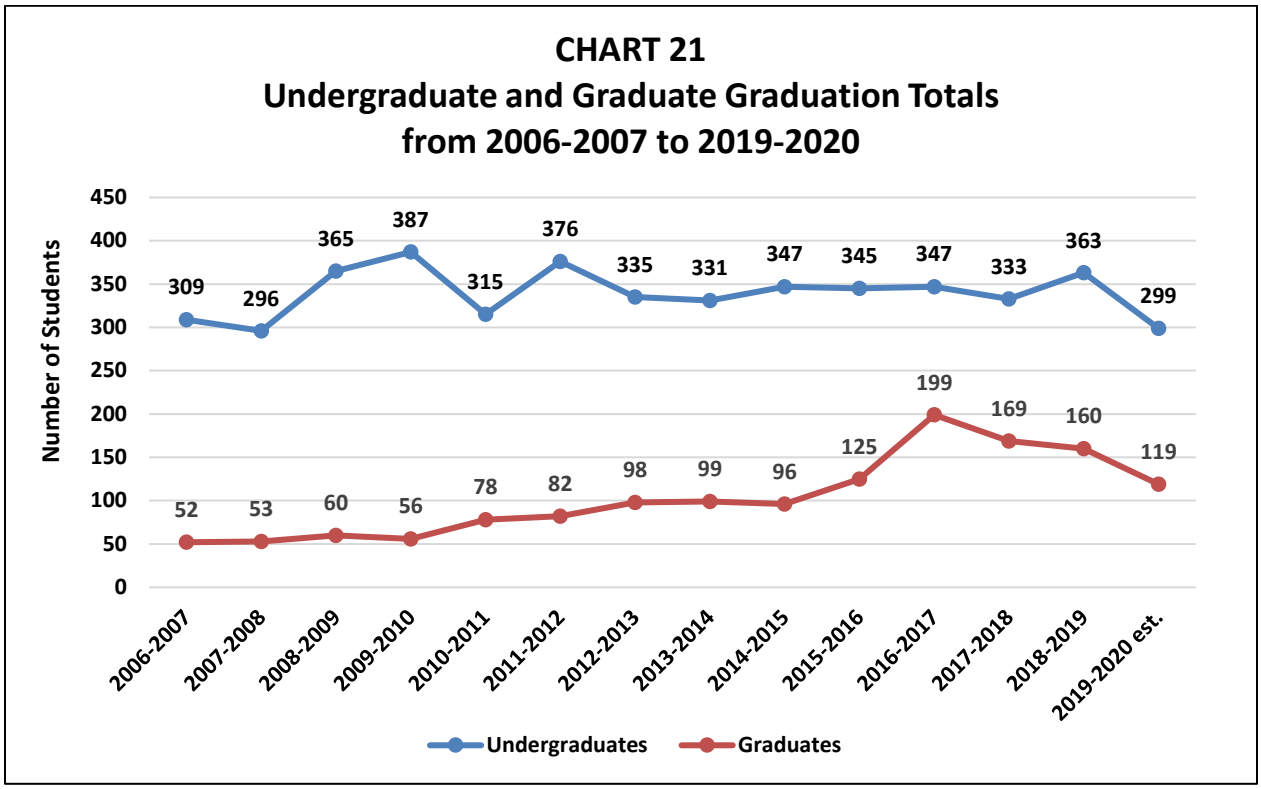


4.3 Comparison of Multi-Year Trends in Undergraduate and Graduate Enrollment and Graduation among Accredited Degree Programs

Both Undergraduate and Graduate Degree Programs experienced an overall increase in enrollment from 2007 to 2020 (Chart 20). Fourteen year Undergraduate graduation rates have fluctuated from around 300 to 390 (Chart 21). Graduate graduation rates rose to a peak of 199 in 2016-2017 but have declined since then and into the present (Chart 21).

Similar to enrollment patterns, graduation rates among Undergraduate and Graduate Degree Programs show an overall upward trend over the past thirteen years (Chart 21).





4.4 Accredited Degree Programs Enrollment Requirements

Five of 28 accredited Undergraduate Degree Programs have a selective admission process outside their University admission requirements. Eight accredited Graduate Degree Programs reported a selective admission process.

4.5 Student Applicant and Employment Trends

Accredited Degree Programs were asked about the number of students applying to their Degree Program. Five Undergraduate Degree Programs reported more applicants than students admitted. Twelve Undergraduate Degree Programs reported having approximately the same number of student applicants as the number admitted.

Two Graduate and six Undergraduate Degree Programs reported having more students apply than are admitted.

The great majority of Undergraduate and all Graduate Program Directors reported observed increases in EH job opportunities.

5.0 Student Demographics

5.1 Diversity

Currently, approximately 37% of reported Undergraduate students enrolled in EHAC Accredited Degree Programs are minorities. This represents a decrease from the 2018-2019 academic year (Diversity data was incomplete for 2016-2018). Chart 22 shows the trend in numbers of UG minority students over the last eleven years. Diversity numbers have fluctuated during the last nine years due in part to the gain and loss of accreditation of historically black colleges including Spelman College (accredited in 2005/accreditation lost in 2012). African American students made up the majority of diverse UG students from 2009-2010 to 2014-2015 but were surpassed in number by Hispanic students from 2015-2016 to the present. The Asian student population dropped sharply from 2010-2011 to 2011-2012 and has remained steadily behind African American and Hispanic students since 2013-2014.

Graduate student diversity numbers are similar to Undergraduate numbers related to the predominance of African American students; however, unlike UG students, Asian students have outnumbered Hispanic students by almost 50% from 2010-2011 to 2015-2016 (Chart 23). This trend reversed in 2017 with Hispanic students outnumbering Asian students, a trend that continues into the present. Additionally, the African American population increased significantly in 2015-2016, due to the addition of Fort Valley State University to EHAC Accredited Degree Programs.

Chart 24 presents the total number of diverse Graduate and Undergraduate students for the past thirteen years. Student numbers rose from a low of 344 in 2006-2007 to a high of 699 in 2018-2019. 2019-2020 saw a decrease in diverse graduate students, again due in part to the loss of the graduate degree program at Old Dominion University.

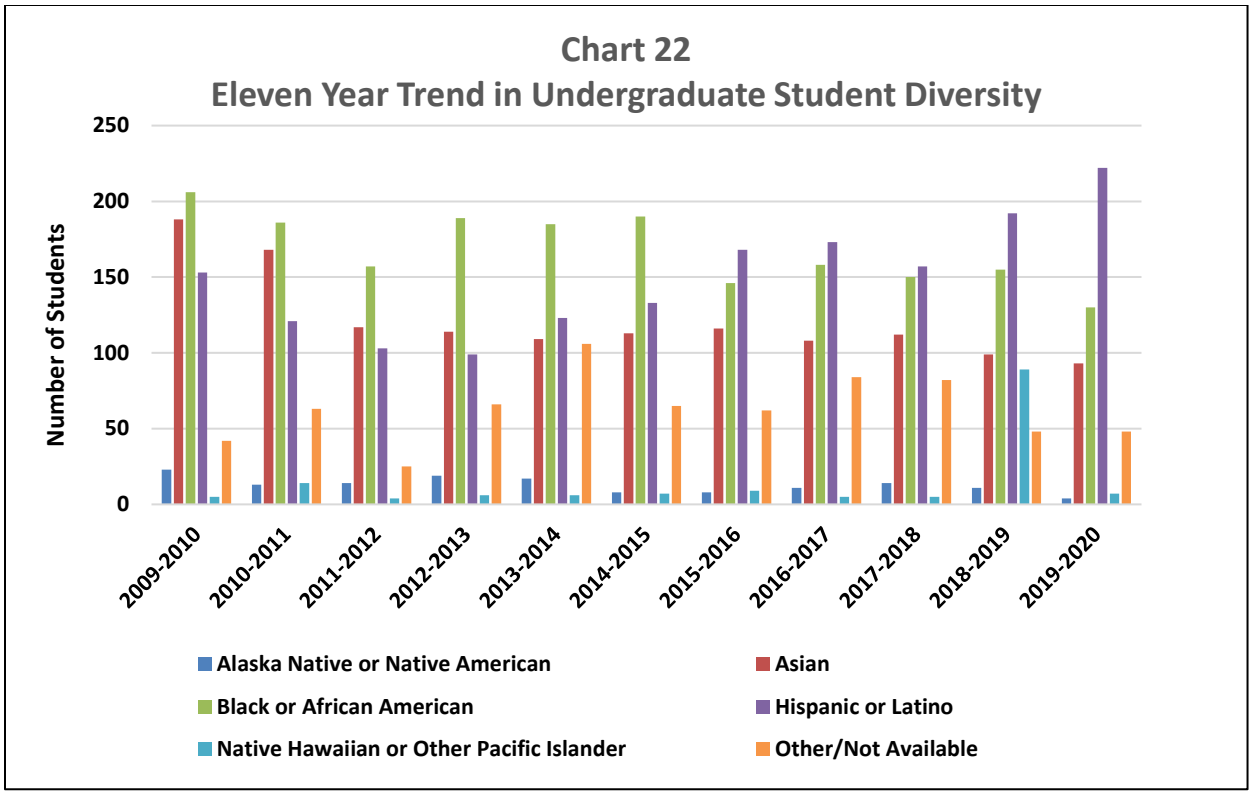


Chart 22
Eleven Year Trend in Undergraduate Student Diversity
Number of Students
250
200
150
100
50
0
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
Alaska Native or Native American
Asian
Black or African American
Hispanic or Latino
Native Hawaiian or Other Pacific Islander
Other/Not Available

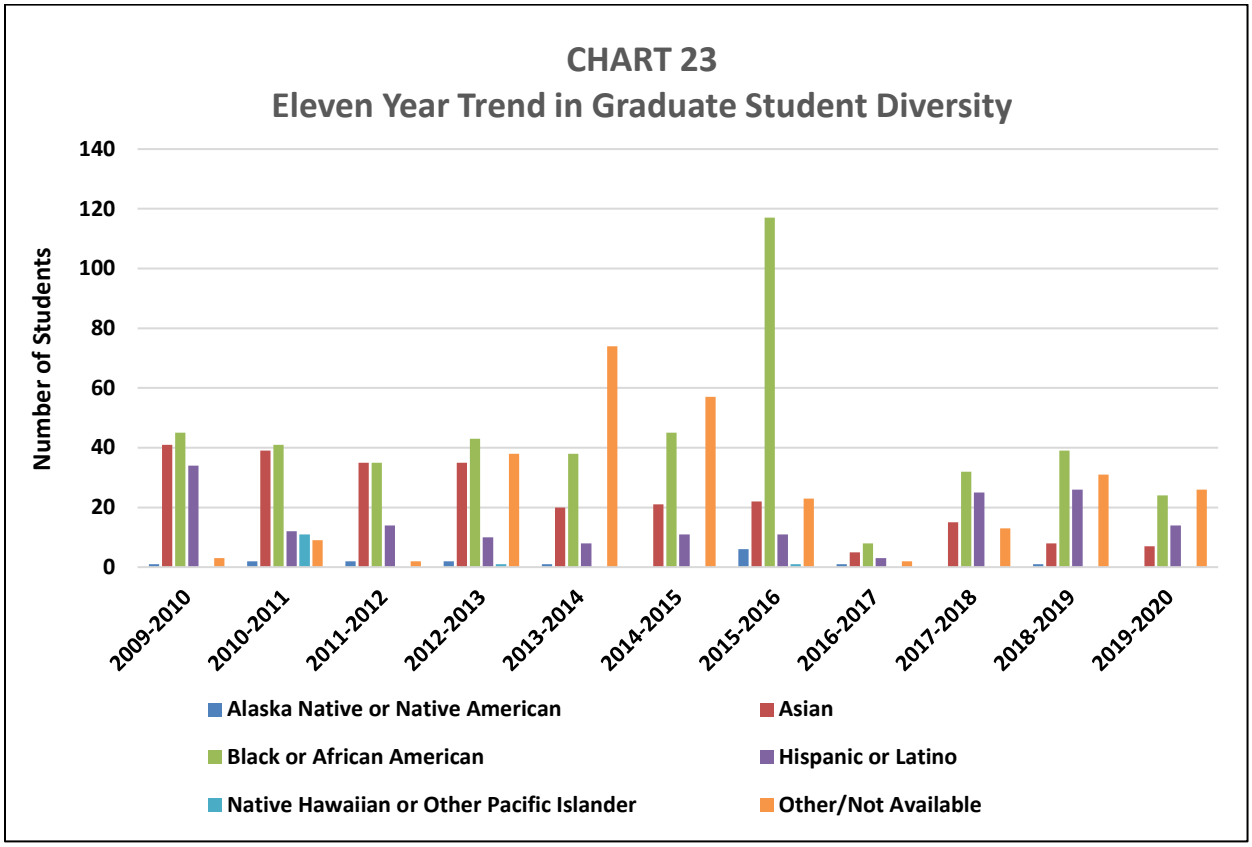
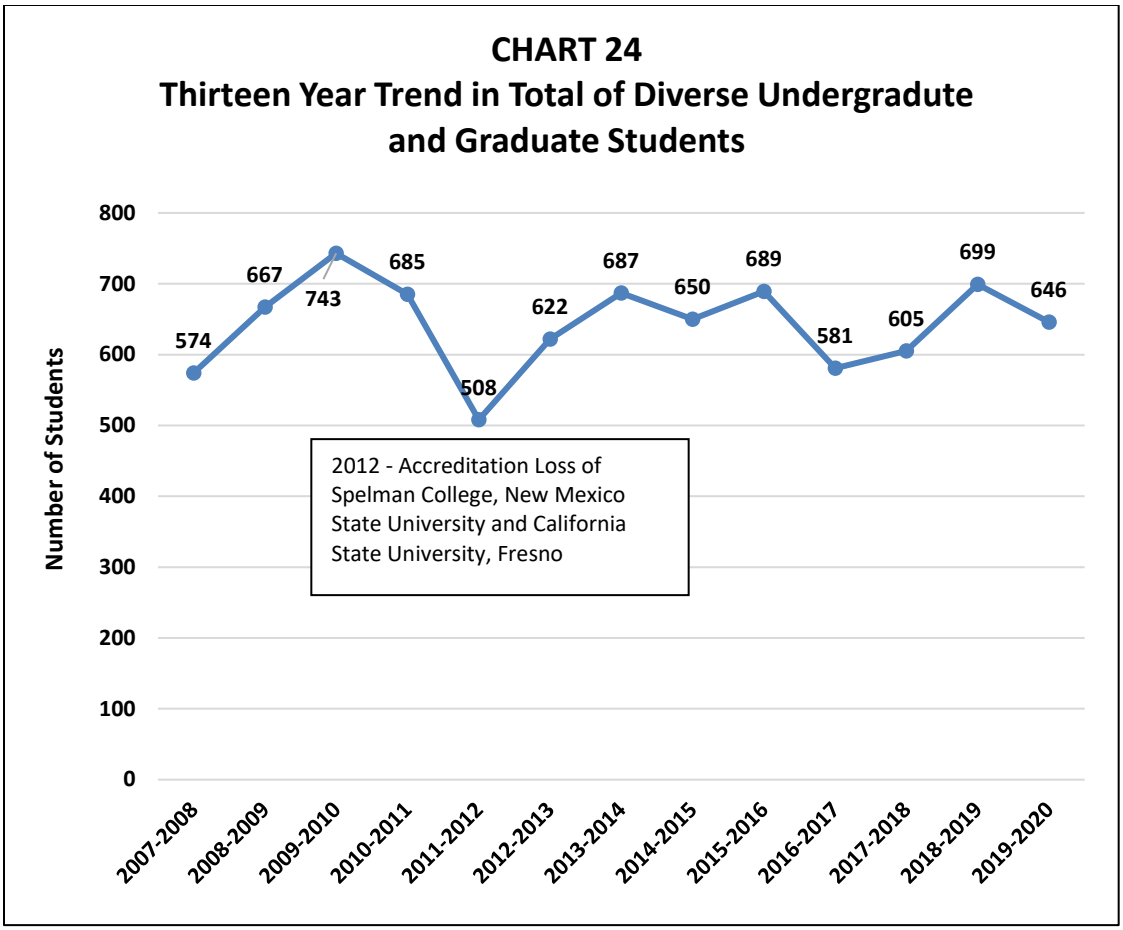


CHART 23
Eleven Year Trend in Graduate Student Diversity
Number of Students
140
120
100
80
60
40
20
0
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
Alaska Native or Native American
Asian
Black or African American
Hispanic or Latino
Native Hawaiian or Other Pacific Islander
Other/Not Available



5.2 Enrolled Students by Gender

Chart 25 shows 2019-2020 gender numbers for Undergraduate and Graduate Degree Programs. Similar to years past, female students outnumber male students in UG programs, reflecting an historic trend (Chart 26). 2019-2020 continued a three year trend of more female students enrolled in Graduate Degree Programs which differs from the historic norm, where female Graduate students outnumbered male Graduate students only three times during 2009-2017 (Chart 27).

Chart 28 presents the historic trend for both male and female Undergraduate and Graduate students over the past thirteen years. The overall trend shows total female students surpassing male student numbers in all years except 2008-2009.

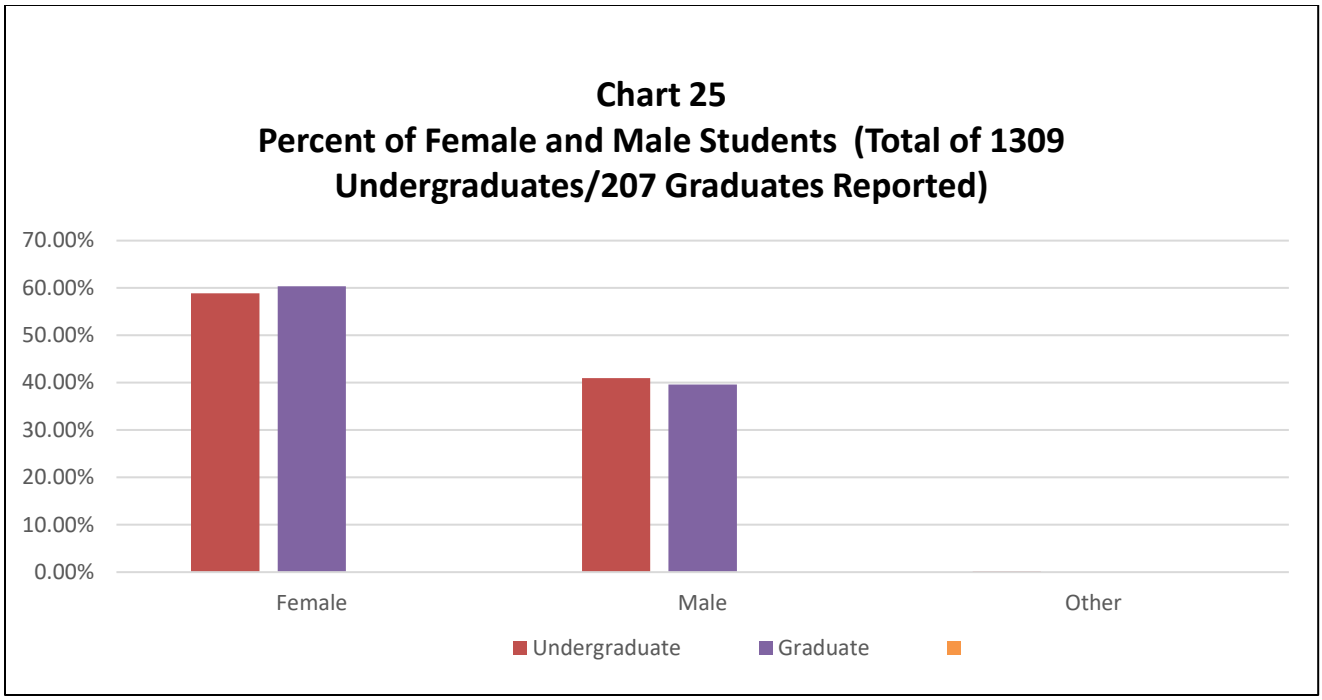


Chart 25
Percent of Female and Male Students (Total of 1309 Undergraduates/207 Graduates Reported)
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Female
Male
Other
Undergraduate
Graduate

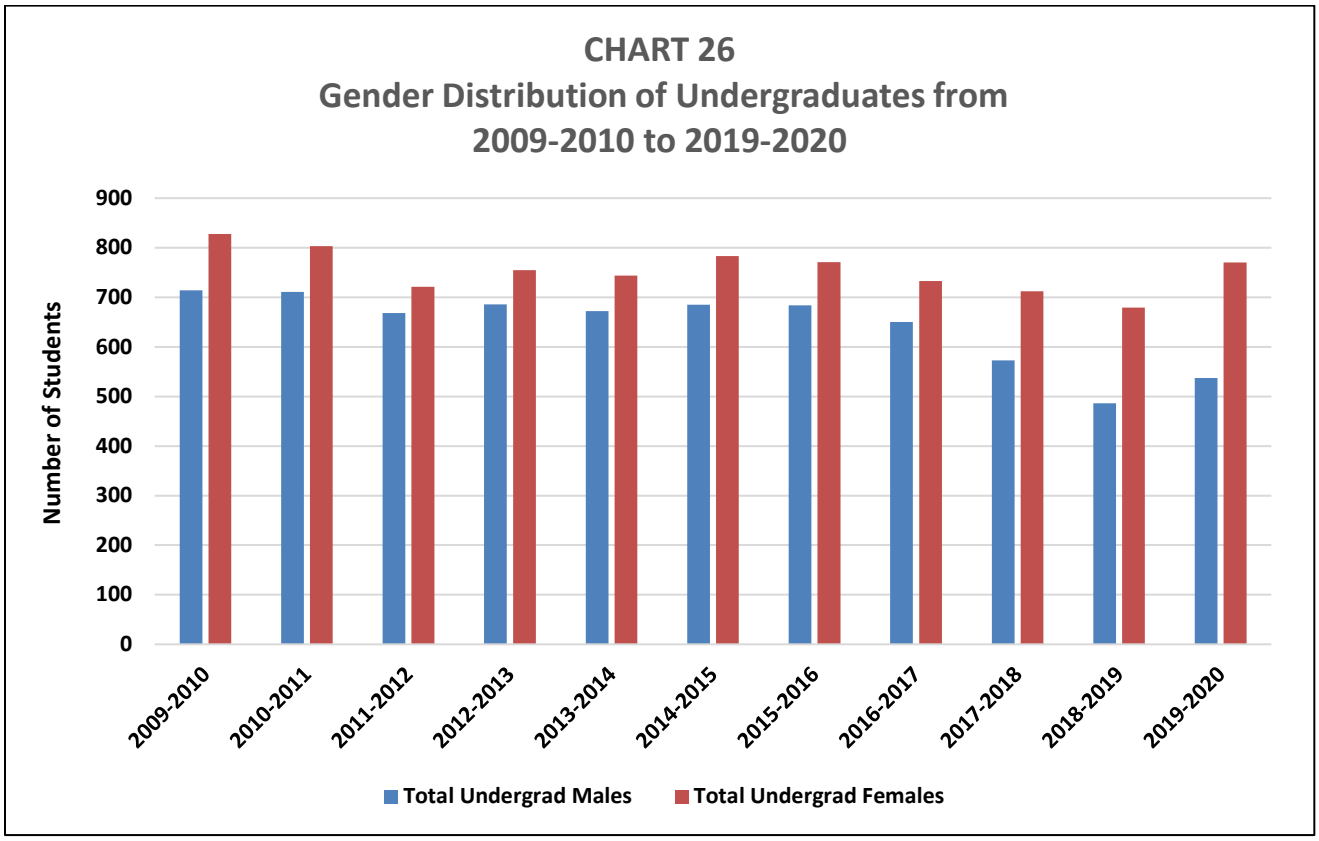


CHART 26
Gender Distribution of Undergraduates from 2009-2010 to 2019-2020
Number of Students
900
800
700
600
500
400
300
200
100
0
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
Total Undergrad Males
Total Undergrad Females

CHART 27
Gender Distribution of Graduate Students from 2009-2010 to 2019-2020

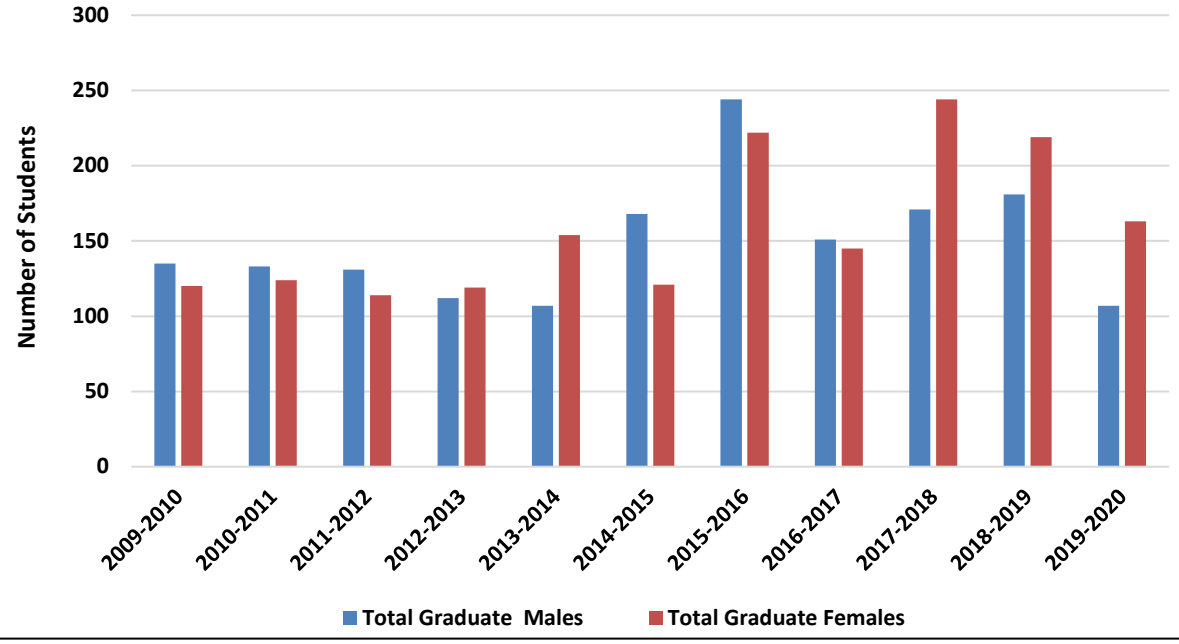
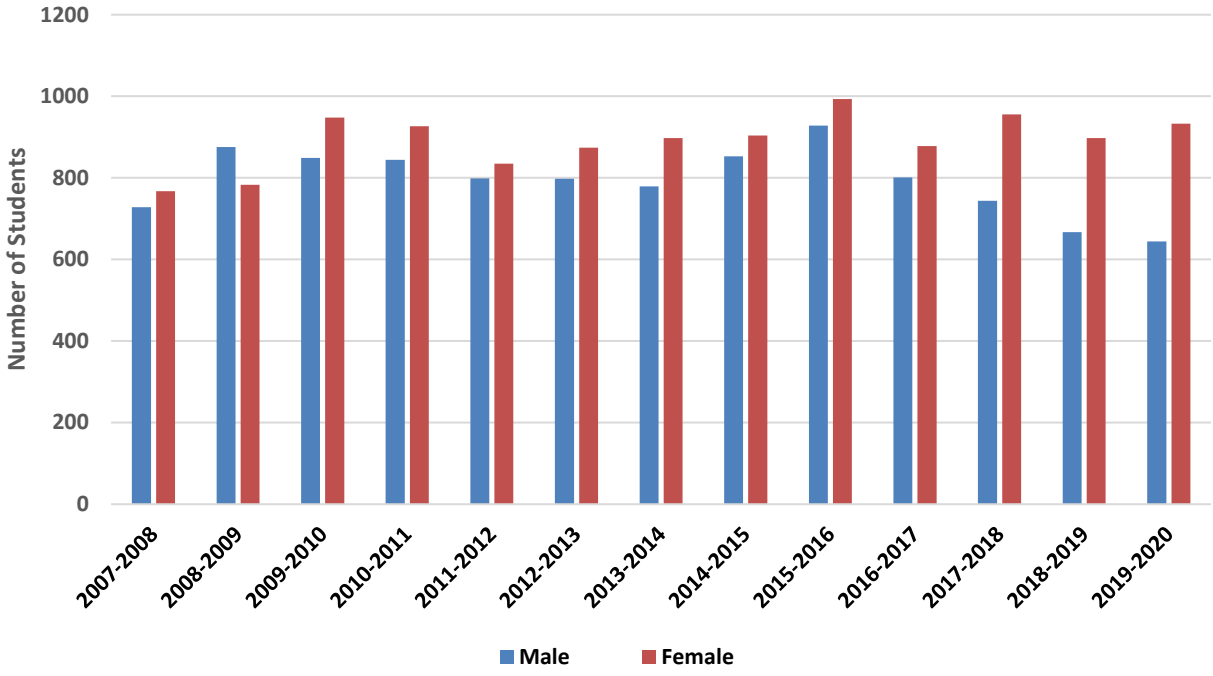


CHART 28
Distribution of All Male and Female Undergraduate and Graduate Students from 2007-2008 to 2019-2020



5.3 Enrolled Students by Age

Chart 29 presents Undergraduate and Graduate student age breakdowns. Not surprisingly, students ages 18-22 lead Undergraduate enrollment numbers while the majority of Graduate students range in age from 28-30. This trend differed from 2017-2018 when more graduate students ranged in age from 31-40.

Historic trends in age of Undergraduates show steady matriculation of recent high school graduates, a steady but overall decline in students 23-30 years old, with a slight increase in 2019-2020, and a steady but low enrollment of students 31-40 years old (Chart 30). Minor enrollment of students over 41 years of age has declined for the most part since 2009.

Since 2012-2013, historic trends in the age of Graduate students reflect upward trends until 2017-2018, when there was also a notable decline in 23-30 year old Graduate students and increase in 31-40 year students (Chart 31). 23-30 year old Graduate students rebounded in 2018-2019, with a correspodning drop in 31-40 year old students. 2019-2020 saw similar trends.

Chart 29
2019-2020 Age Distribution of Undergraduate and Graduate Students
(Total of 1161 Undergraduates/250 Graduates Reported)

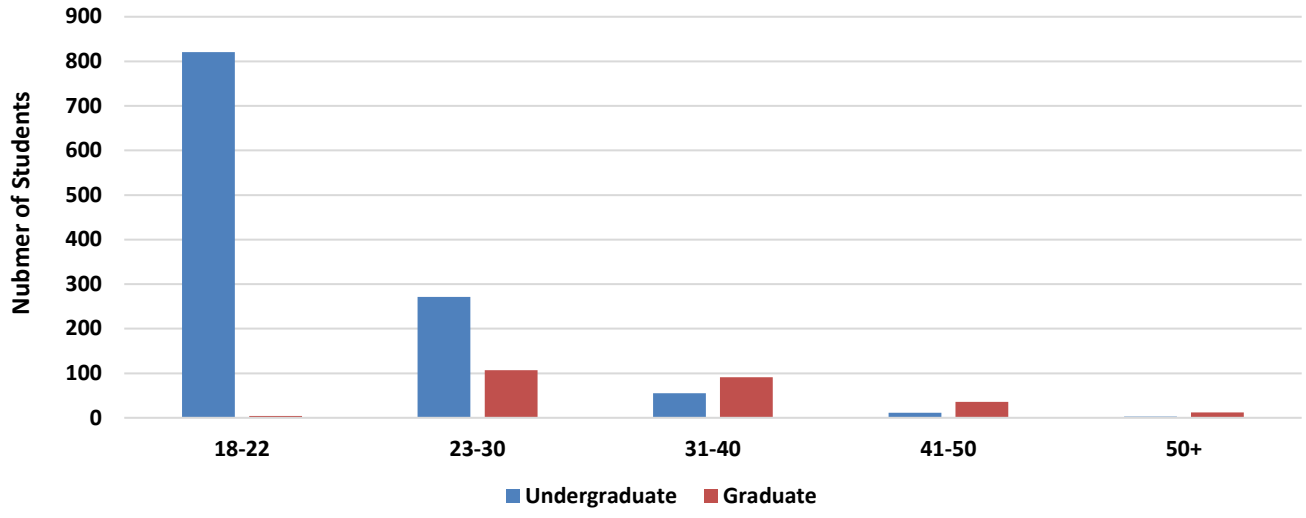


CHART 30
Age Trends for Undergraduate Students from 2009-2010 to 2019-2020

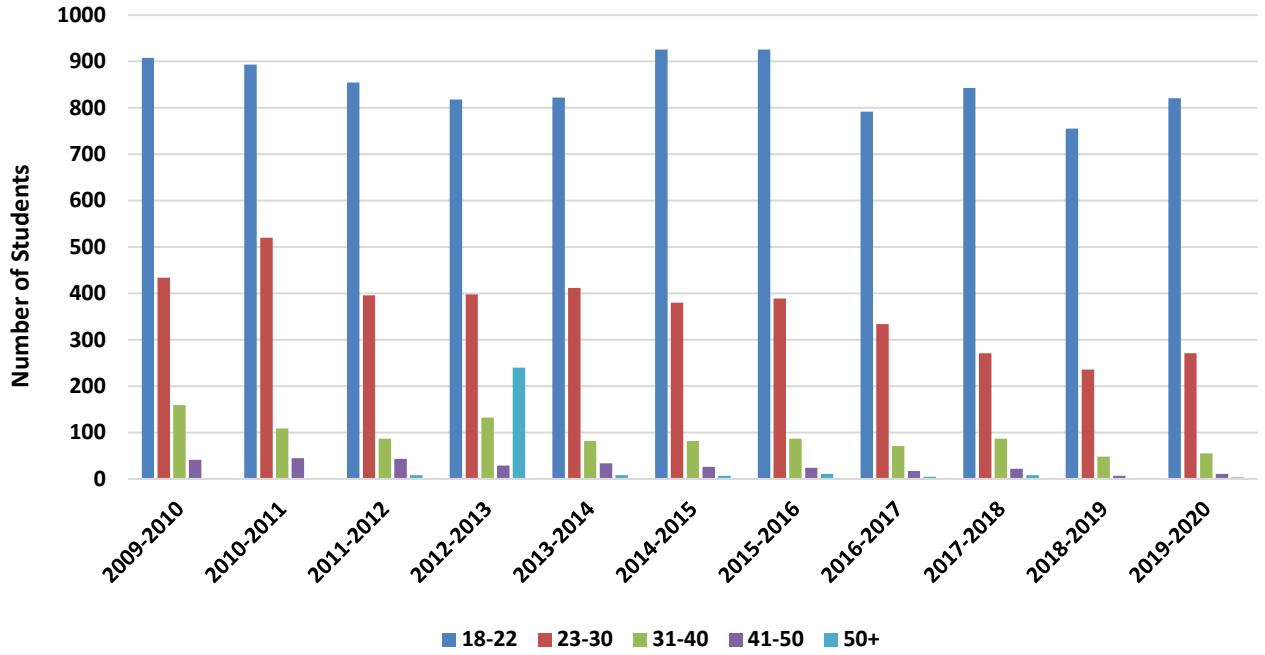
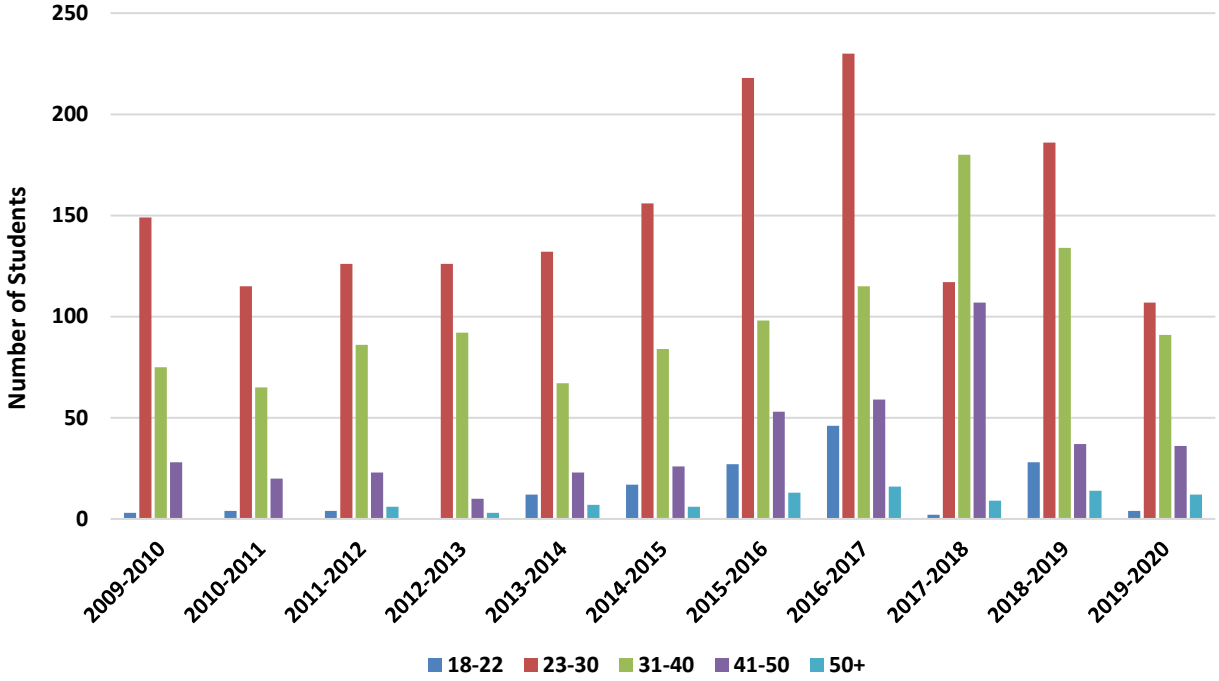


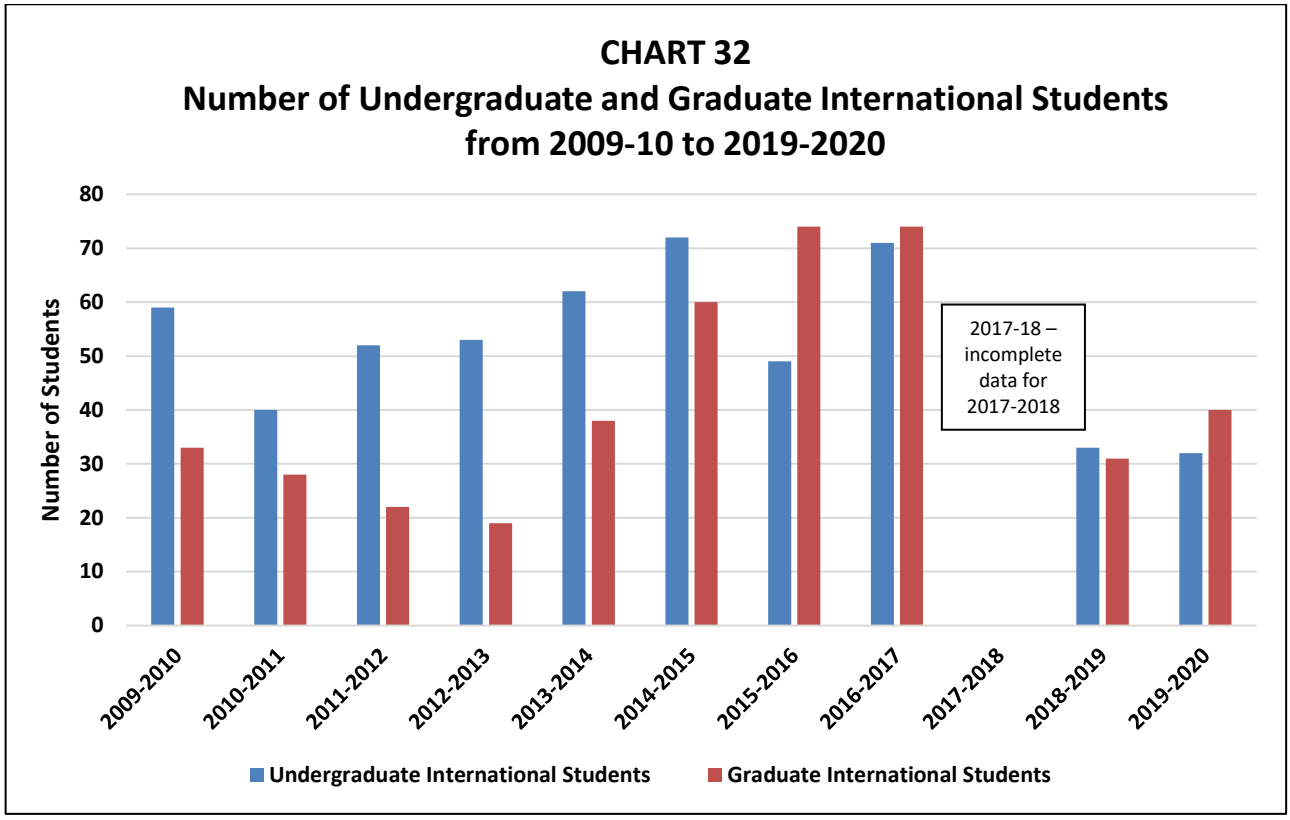
CHART 31
Age Trends for Graduate Students from 2009-2010 to 2019-2020



5.4 International Students

Accredited Undergraduate and Graduate Degree Programs reported a total of 72 international students enrolled for the 2019-2020 year. This is a slight increase from 2018-2019.

Chart 32 shows the distribution of international students among Undergraduate and Graduate Degree Programs for the last ten years (with the exception of 2017-2018 when data was incomplete). Chart 32 also shows a steady increase in numbers of Undergraduate international students after a sharp decline in 2010-2011 and similar drop in 2015-2016. The number of international Graduate students declined from 2009 to 2013 but began to increase in 2013-2014. 2018-2019 saw a dramatic decrease in the total of international students which continued in 2019-2020. Note that this may be a reporting issue rather than reflective of actual numbers.

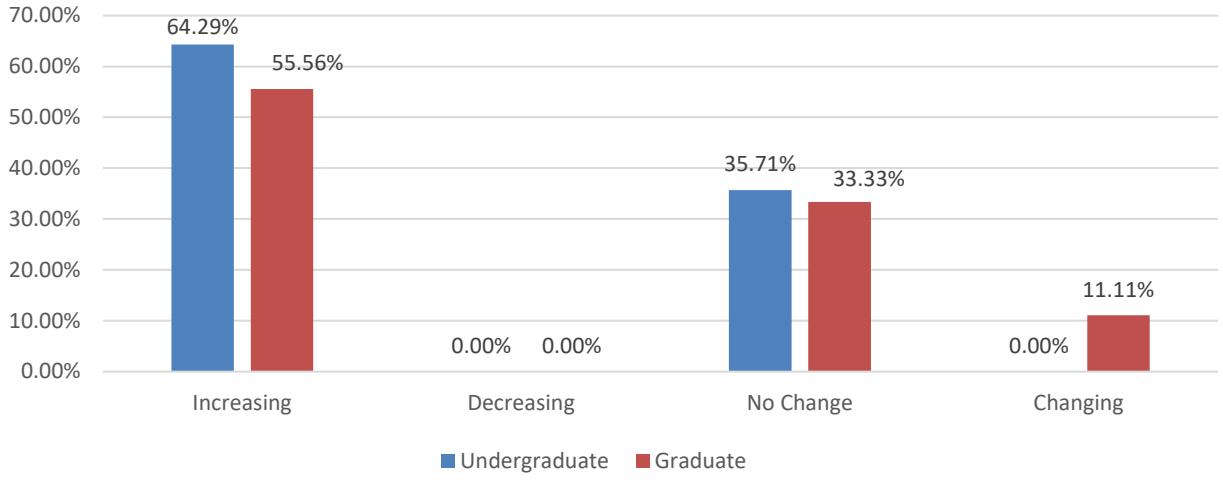


6.0 Employment after Graduation

6.1 Employment Opportunities after Graduation

Sixty-four percent of Undergraduate Degree Programs reported an observed increase in EH employment opportunities. No programs have observed a decrease in job opportunities. More than half of Graduate Degree Program Directors reported an increase in EH employment opportunities (Chart 33).

Chart 33
Undergraduate and Graduate Program Director Opinions of Employment Opportunities Available for Environmental Health Graduates - 2019-2020



6.2 Employment Areas: Public vs. Private Sectors

Based on accredited Degree Program's Graduate tracking systems for 2019-2020, Undergraduate Degree Program Directors reported that 46% of former UG students are working in the private sector while 42% of former UG students are working in the public sector (Chart 34). Thirty-one percent of Graduate students found employment in the private sector, while almost 60% of former Graduate students are working in the public sector. Refer to Chart 35 for details regarding where UG graduates and Master's program graduates are working in the public sectors. Significantly, for students employed in the public sector, more Undergraduates find jobs with local health departs, while more Graduates find employment at state health departments. Charts 36 and 37present the distribution of Undergraduate and Graduate employees working in the private sector.

Chart 34
Distribution of Undergraduate and Graduate Students Working in the Private, Public and Non-profit Sectors - 2019-2020

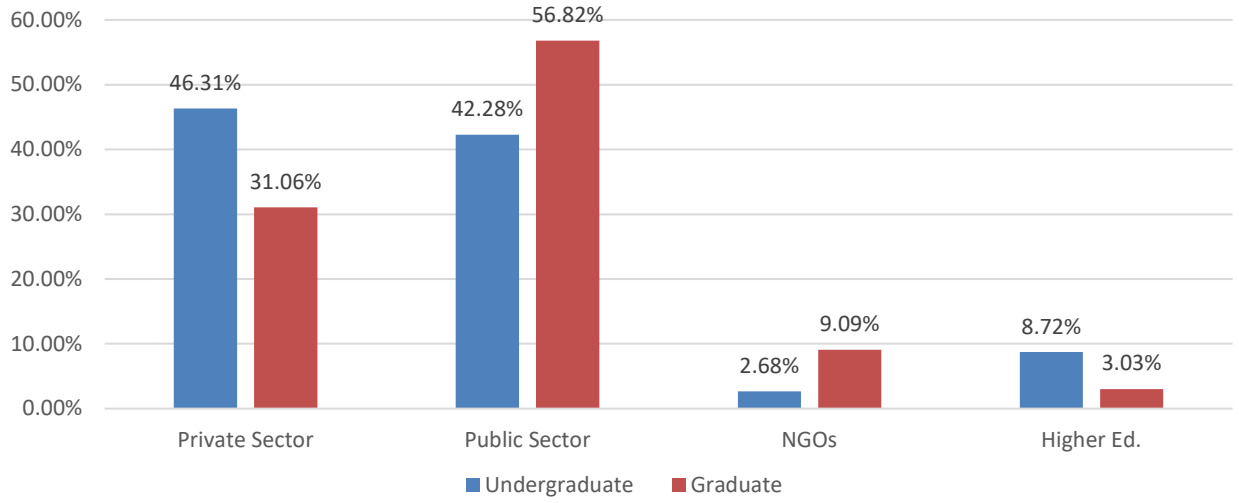
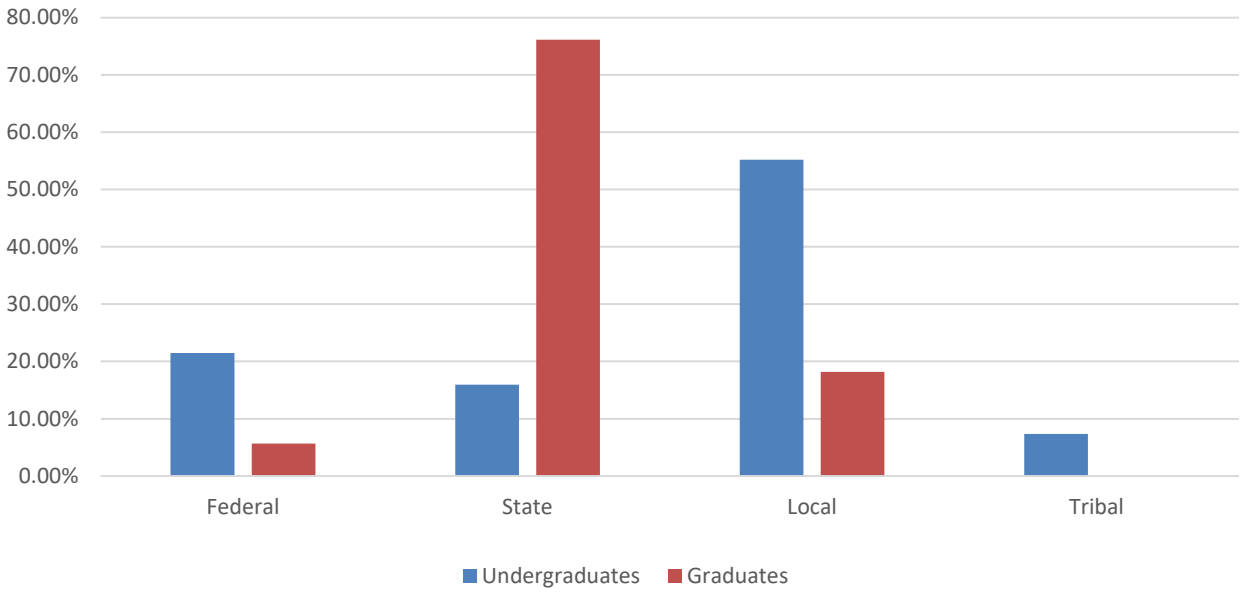
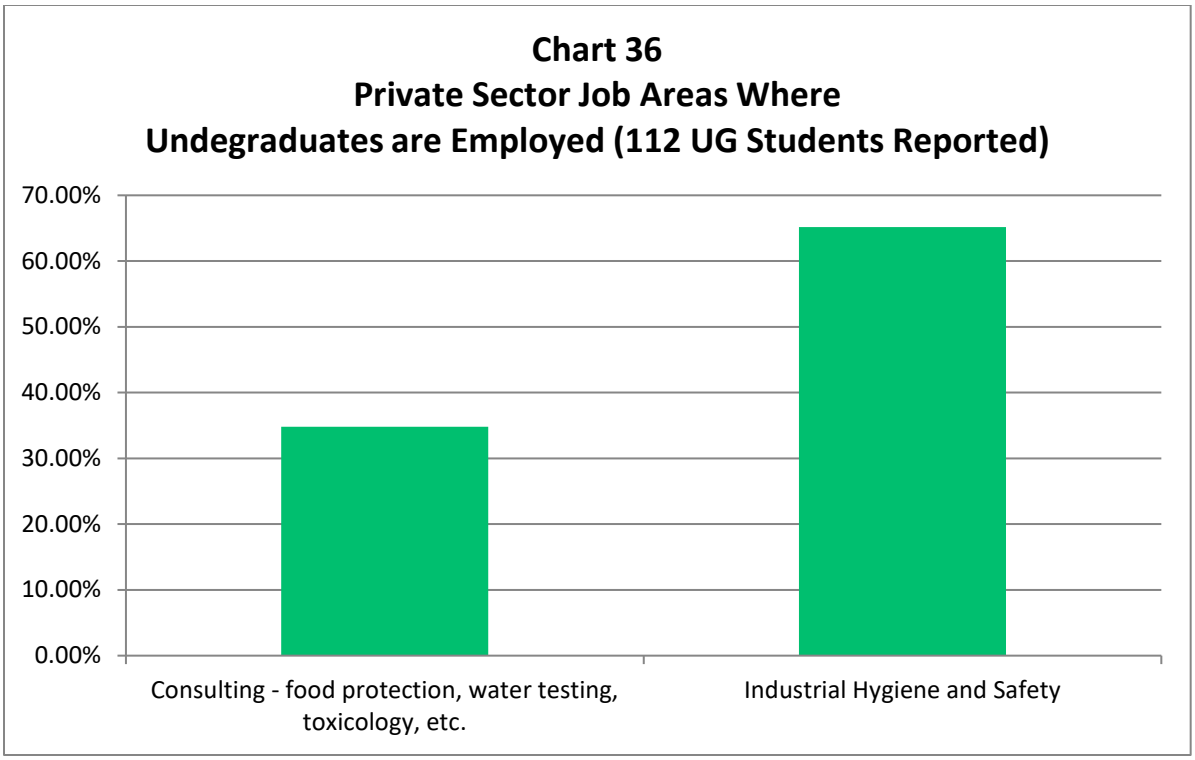
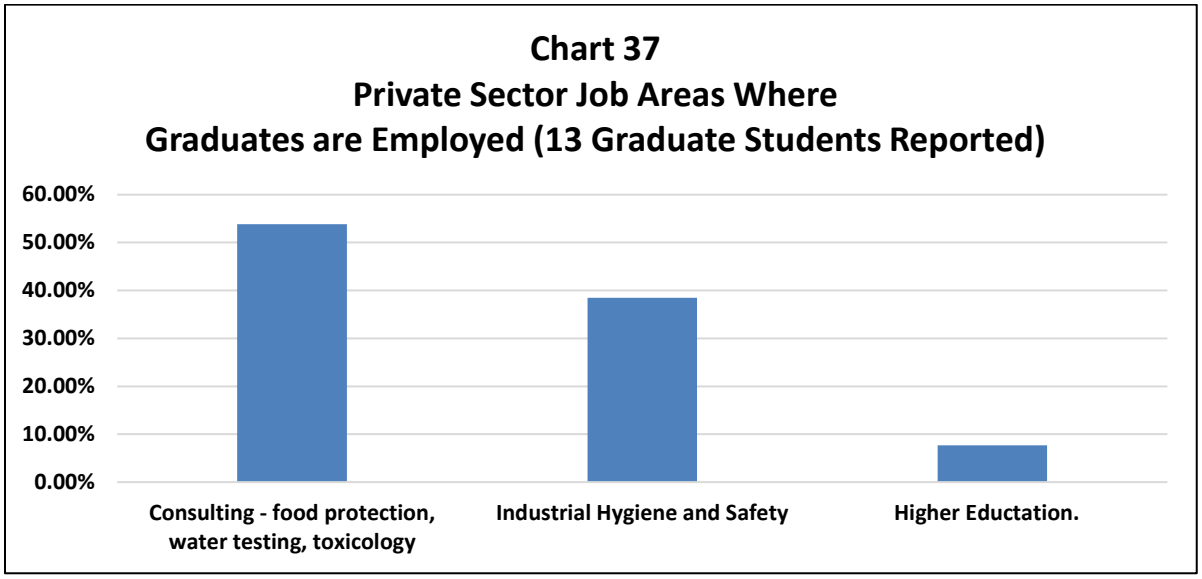


Chart 35
Public Sector Job Areas Where UG Students (163 UG Students Reported) and Graduate Students (88 Graduate Students Reported) are Employed



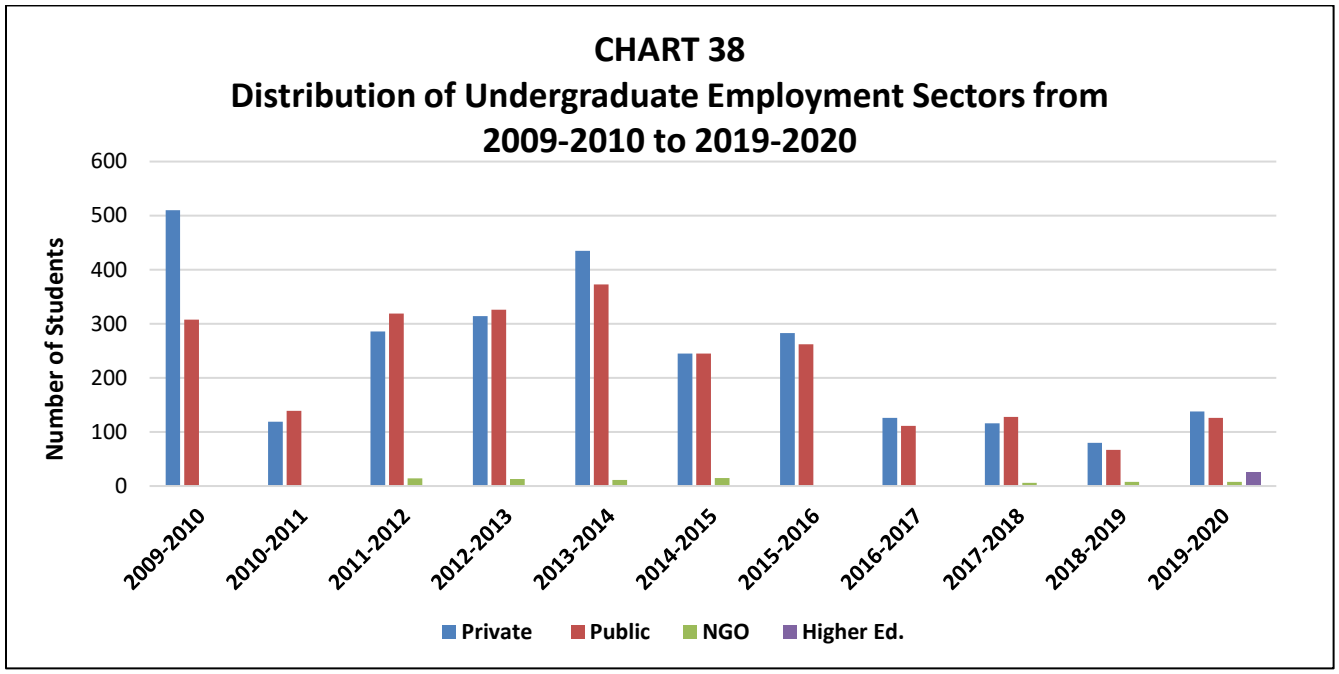


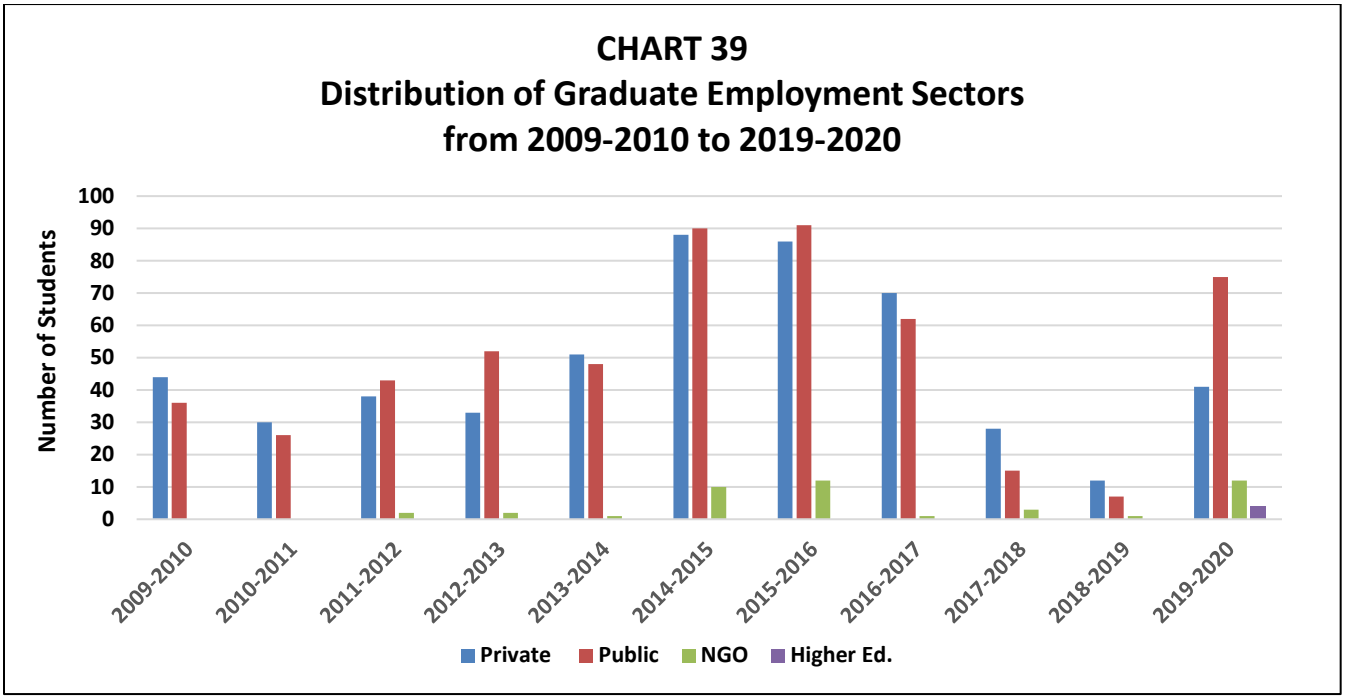


The eleven-year trend for Undergraduates employment shows that following a significant drop in private employment in 2009 to 2010, private and public employment have remained essentially neck in neck, with minor fluctuations including public positions edging ahead of private positions about 50% of the time during the last eleven years (Chart 38).

Graduate student employment patterns are similar to that of Undergraduates, with Chart 38 showing private employment surpassing public jobs more often during the past eleven years. 2019-2020 saw a significant reversal of this trend with public jobs far surpassing the number of jobs with private companies.

Employment with Non-Government Organizations (NGOs) has been generally minimal for Undergraduate and Graduate students over the past ten years with a notable increase in Graduate NGO employment in 2014-2016, and this year, as well (Charts 38 and 39).





Employment with Local Health Departments led an eight-year trend in public sector employment for Undergraduate employment from 2009 to 2018 (Chart 40). 2019-2020 numbers reflect a return to local level employment after a slight drop in 2018-2019. Graduate employment with state agencies increased significantly in 2017-2018, a trend that continues into the present (Chart 41). 2019-2020 showed more than a 50% increase in state held jobs for Graduates. Graduates employed by the Federal government have decreased from a peak in 2014-15, while local government positions have increased slightly from last year (Chart 41).

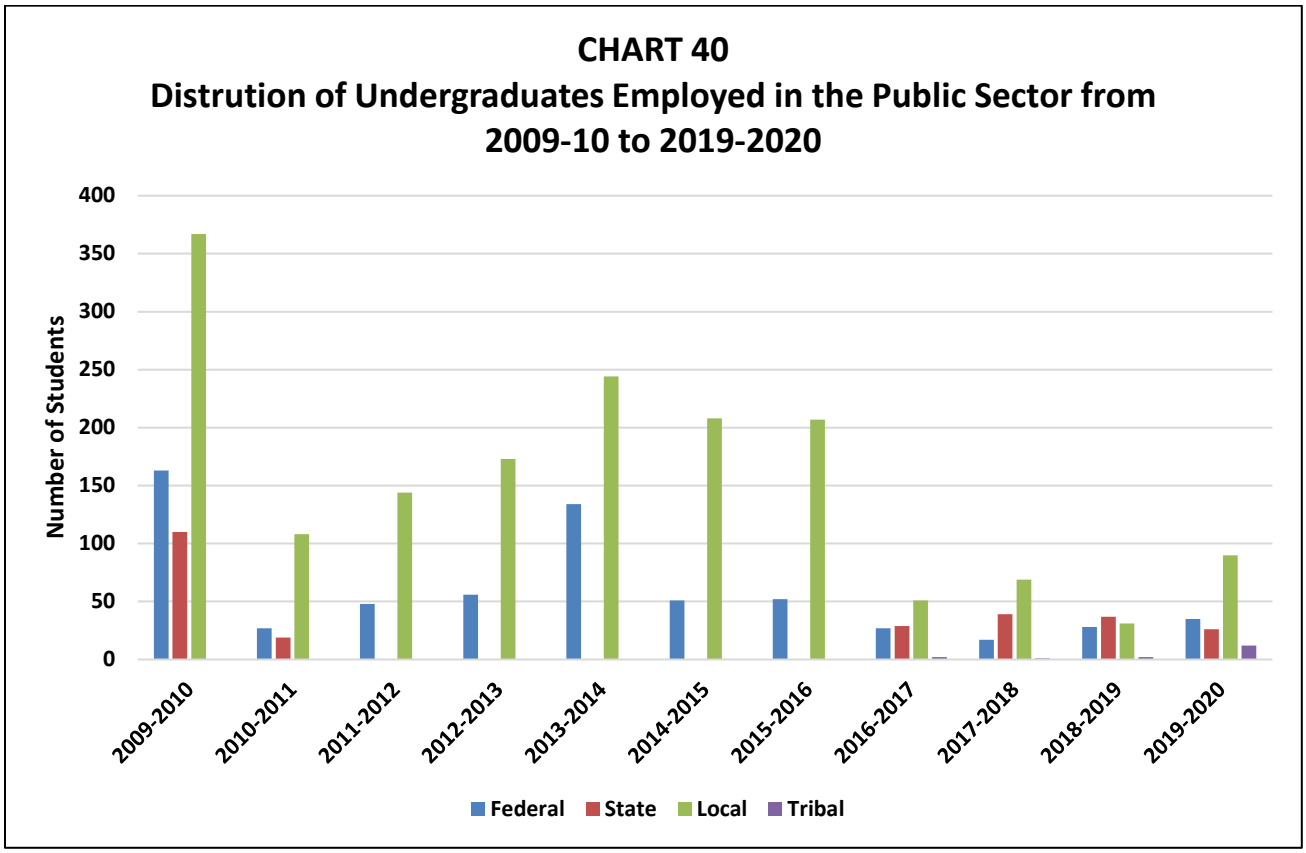
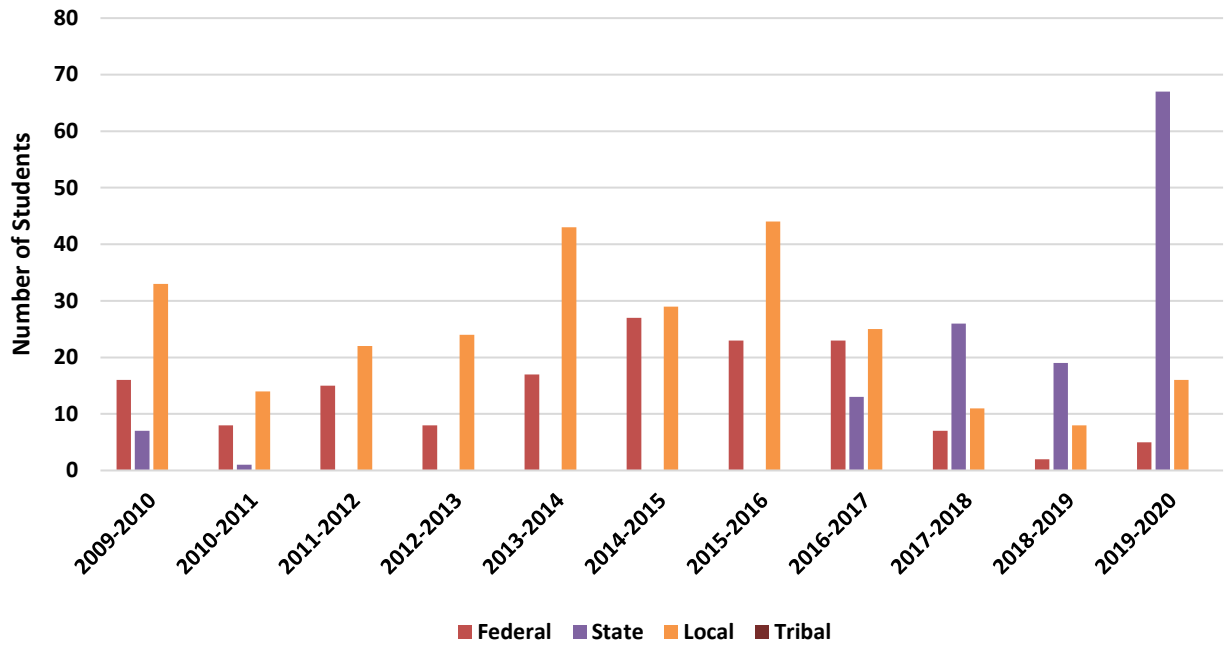


CHART 41
Distrution of Graduates Employed in the Public Sector from 2009-2010 to 2019-2020



7.0 Degree Program Health

Degree Programs were asked to assess their administrations' concern and their own personal concern with enrollment trends in their Degree Programs. An additional question asked if there has been discussion related to potential closure of their EH Degree Programs.

7.1 Administration Enrollment Concerns

Chart 42 shows Undergraduate Degree Program Director's assessments of administration enrollment concern peaked from 2012-2014 at 50%, fell during 2015-2016, increased in 2016-2017, and fell again as of 2017-2018. 2018-2019 saw another rise in administration enrollment concern that is reflected to a slightly lesser degree in 2019-2020. Currently, more than 50% of Undergraduate administrations are assessed by PDs as having concern about low enrollment numbers in their EH Degree Programs.

Graduate Degree Program Director assessments of administration concerns about enrollment show a general increase in the amount of concerned administrations from 2011-2015 and then a marked decline in concern in 2016, which reversed in 2017 (Chart 43). Currently, more than 70% of Degree Program Director's assess their administrations as concerned about low enrollment numbers. This is an increase from 2018-2019. Current increases in enrollment concern are likely due to the uncertainties surrounding the COVID pandemic crisis.

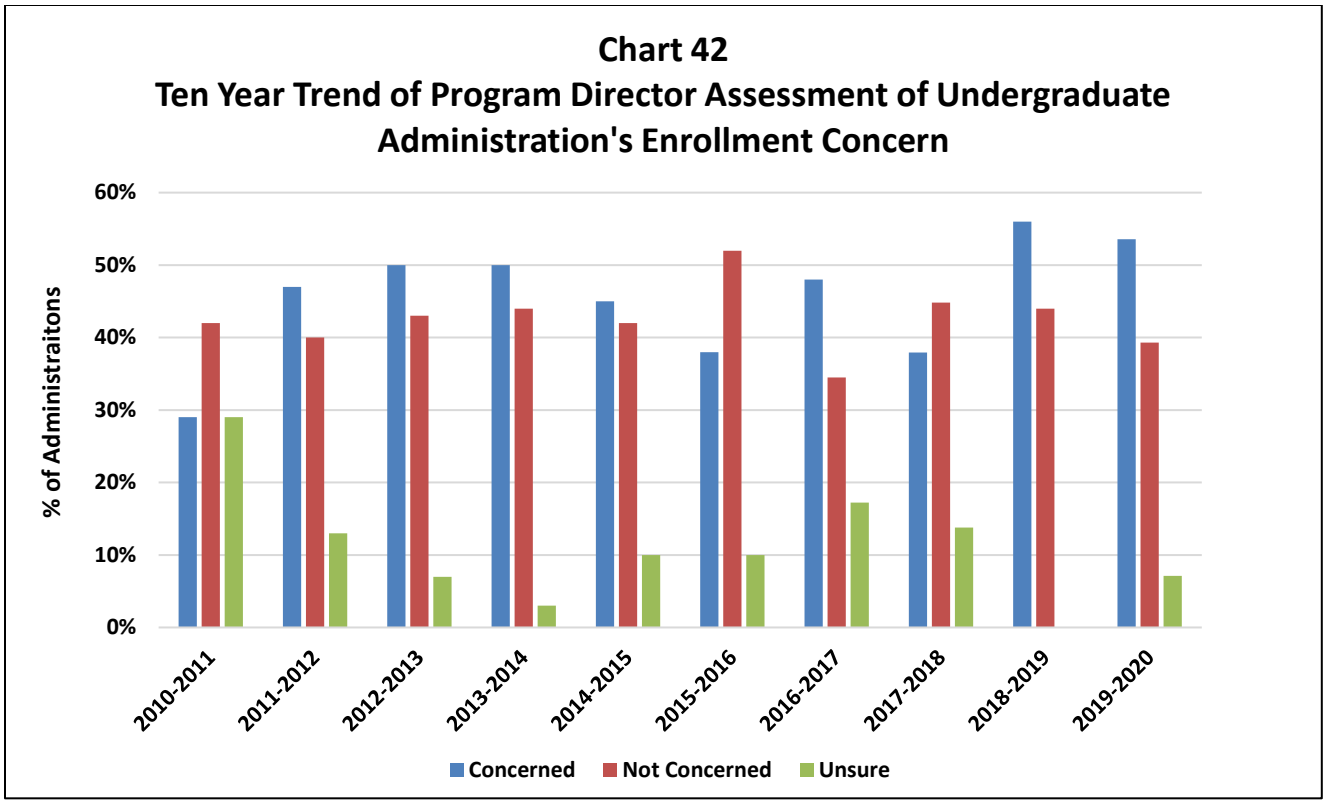


Chart 42
Ten Year Trend of Program Director Assessment of Undergraduate Administration's Enrollment Concern
% of Administraitons
60%
50%
40%
30%
20%
10%
0%
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
Concerned
Not Concerned
Unsure

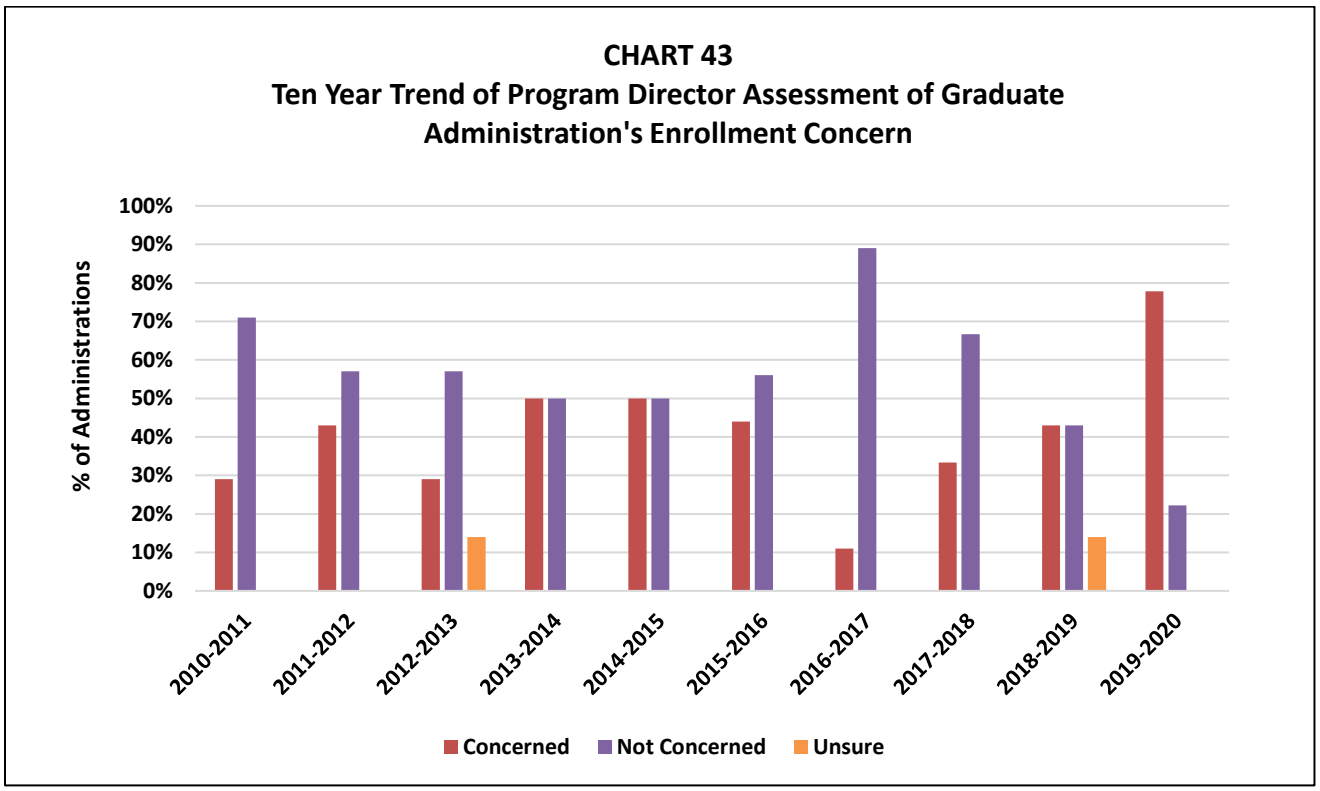
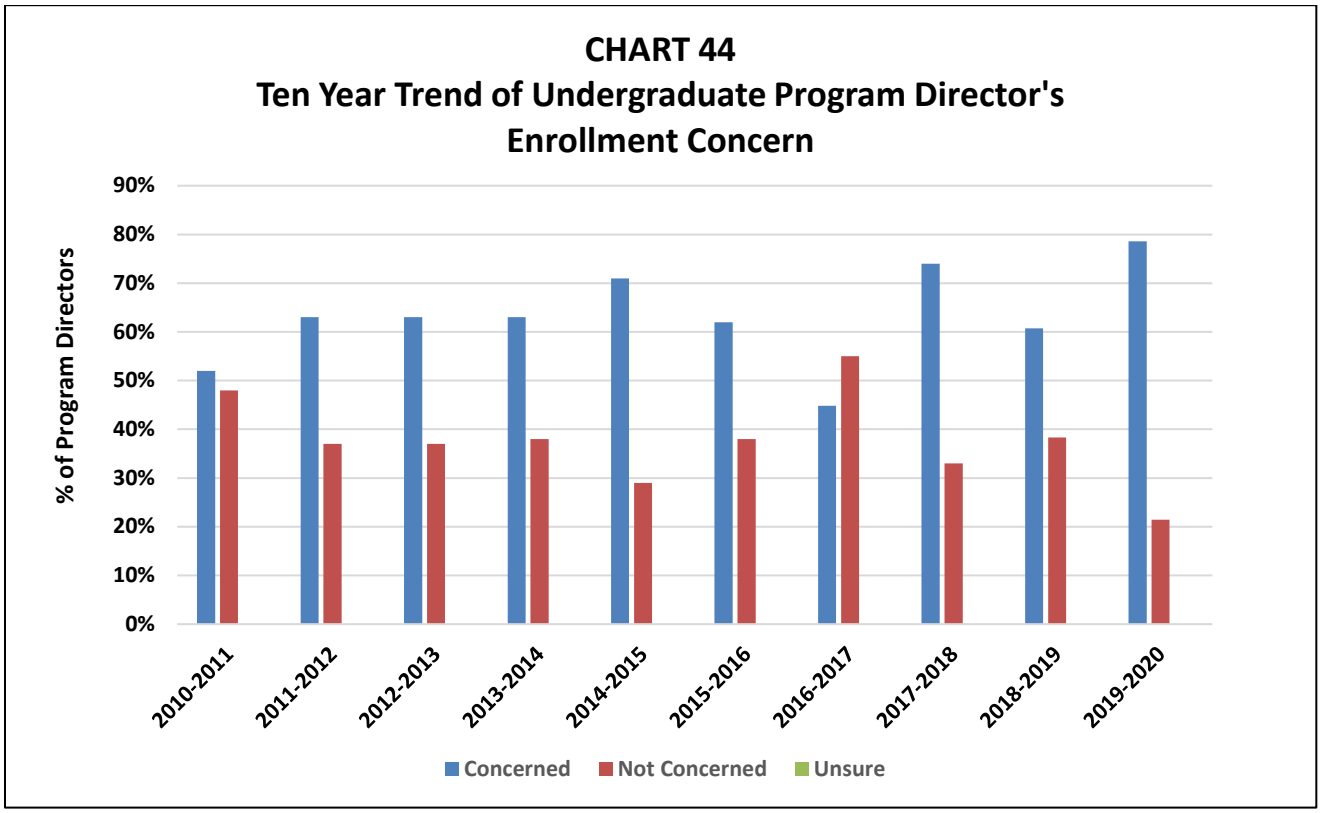


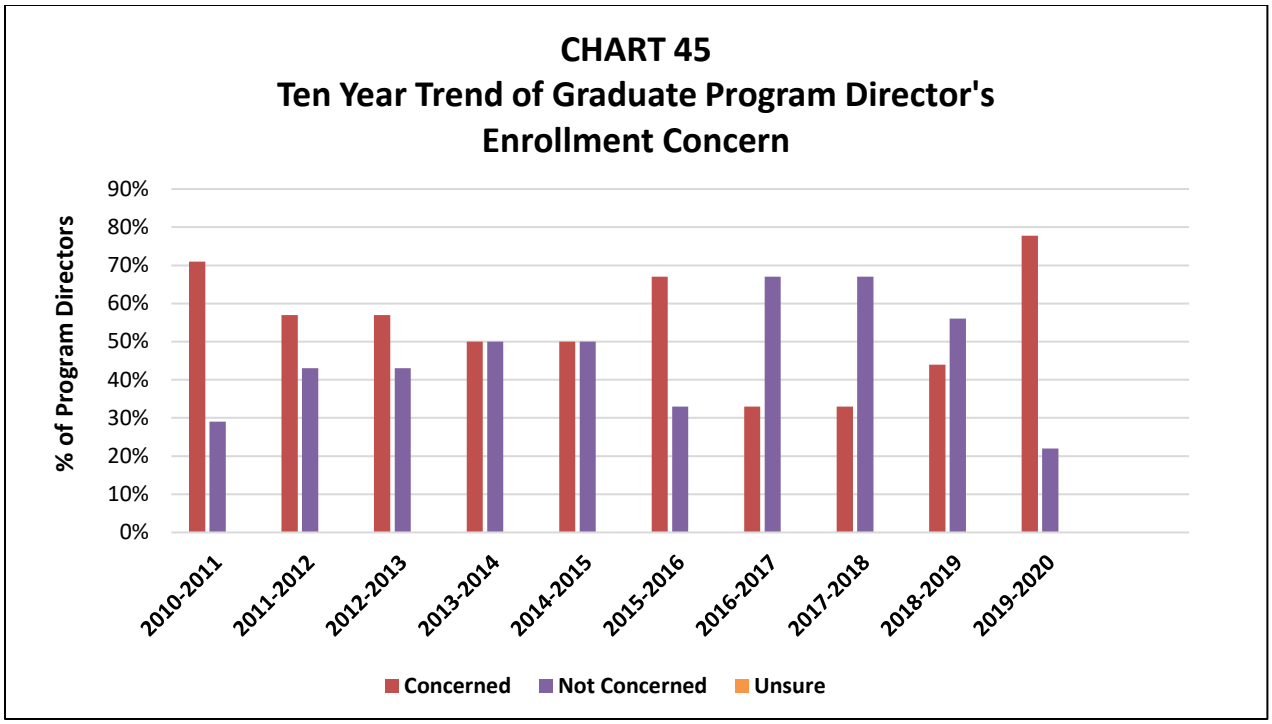
CHART 43
Ten Year Trend of Program Director Assessment of Graduate Administration's Enrollment Concern
% of Administrations
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
Concerned
Not Concerned
Unsure

7.2 Degree Program Director Enrollment Concerns

Excepting the period between 2016 and 2017, Chart 44 shows a steady and high rate of Undergraduate Degree Program Director concern about enrollment numbers for the last nine years and a sharp increase in concern from 2016-2017 to 2017-2018. UG PD concern lessened in 2018-2019 but remained high and increased again in 2019-2020.

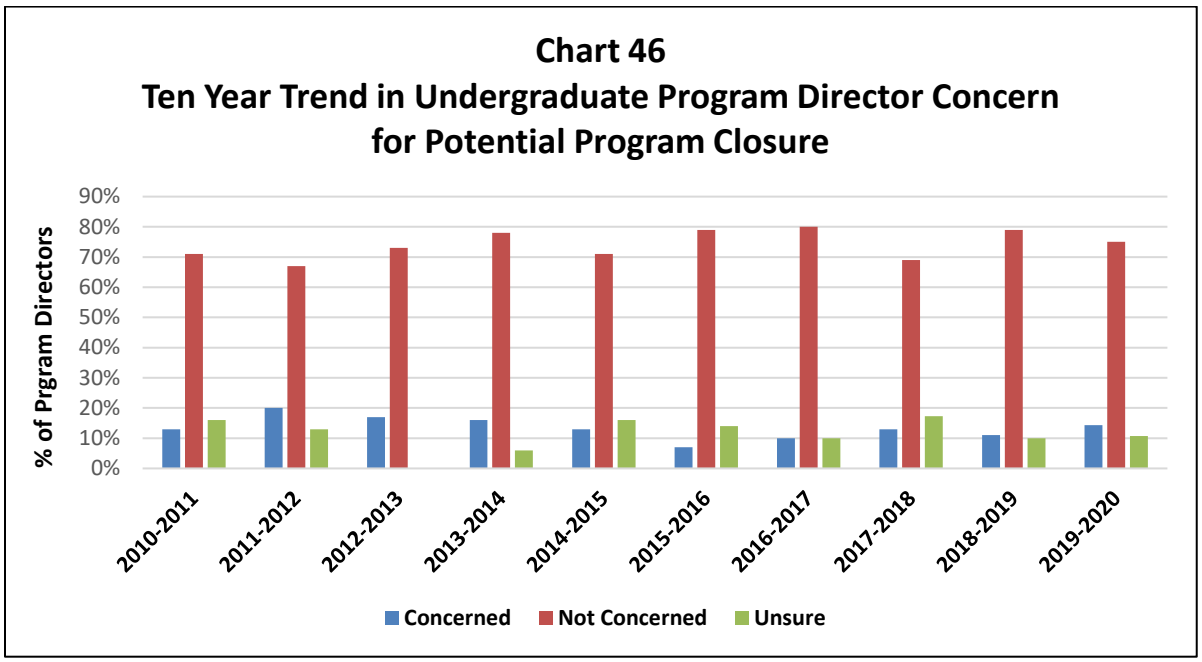
Graduate Degree Program Director enrollment concerns decreased from a 2010-2011 high, then increased sharply in 2015-2016 (Chart 45). Following this increased concern in 2015-2016, concern declined in 2017-2018 but rose slightly in 2018-2019 among Graduate Degree Program Directors. Concern rose significantly in 2019-2020 (Chart 45).

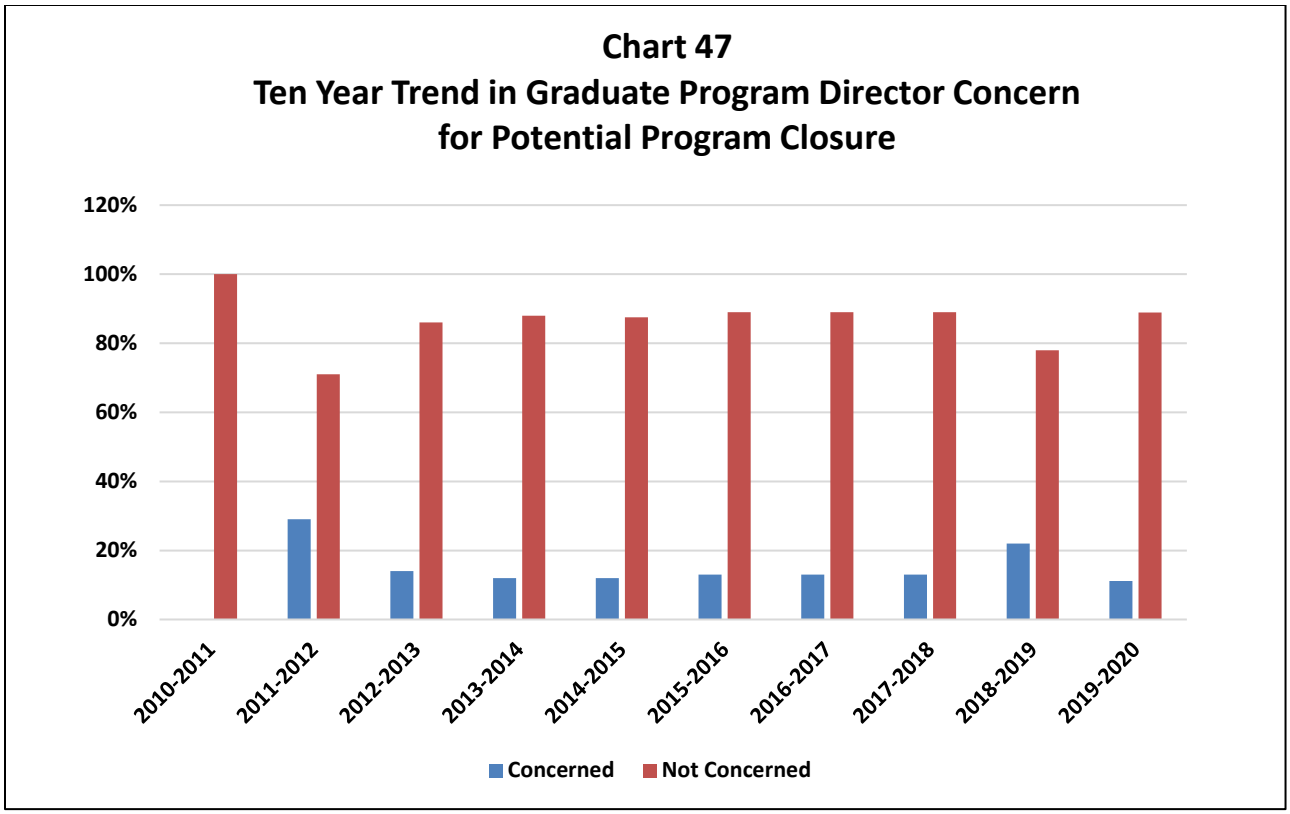




7.3 Degree Program Closure Concerns

The threat of Degree Program closure has remained steadily low for both Undergraduate and Graduate Degree Programs for the past ten-year period, however uncertainty rose slightly among UG Degree Programs in 2017-2018, and remained virtually the same for 2018-2019, decreasing slightly in 2019-2020 (Charts 46 and 47).





7.2 Degree Program Health Commentary

Degree Program Directors were asked to provide an assessment of the general health of their EH Degree Programs. Chart 48 presents the Degree Program health assessment of both Undergraduate and Graduate Degree Program Directors for 2019-2020. Most Undergraduate and Graduate Degree Program Directors report that their Degree Programs are maintaining or improving health-wise. Reports of diminishing Degree Programs were low for Undergraduate Degree Programs, however an increase in concern noted in 2018-2019 continued into 2019-2020 for Graduate PDs. Tables 7 and 8 show Undergraduate and Graduate Degree Program Director's assessments of their Degree Program's health and explanations for their assessments.

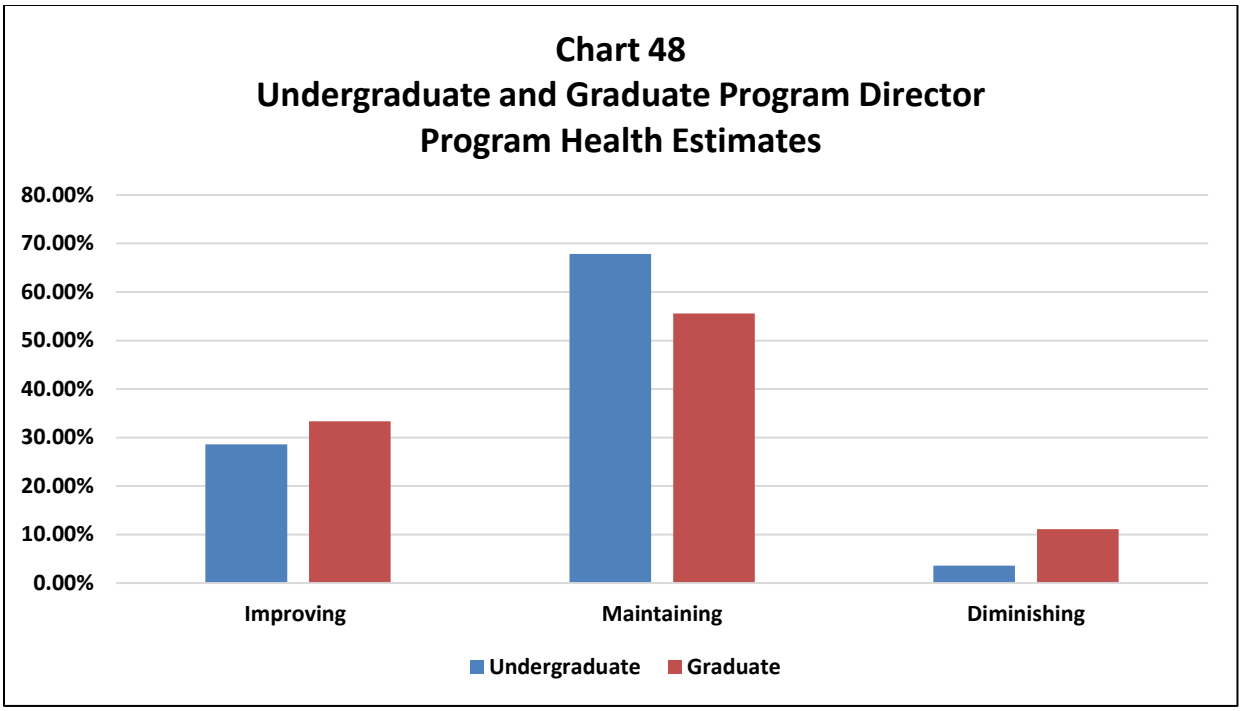


Table 7: Undergraduate Degree Program Director Assessment of Degree Program Health and Explanations – 2019-2020

Undergraduate Degree Program Health Assessments and Explanations:
Degree Program Health Is Improving - explanation
New faculty and areas of research, diverse faculty, partnerships with local EH departments.
Curricular changes and marketing efforts.
We have just reinvigorated our program after years of inactivity. We were just accredited in July 2019 and are happy to be building the program back.
Numbers have fluctuated, we are now at 57.
We are adding new courses in sustainability and climate change that will be appealing to students and will be moving to a new building with new laboratories on main campus that will increase visibility of our major.
Degree Program Health Is Maintaining - Explanations
We aim to launch an MPH concentration in environmental health, and added a new clinical associate professor of environmental health this year.
With concern about future retiring, program is working to increase adjunct pool. That pool is also used to help fill any vacant full-time position.
We are trying to maintain and increase the program.
Currently maintaining. We are actively pursuing new methods/sources for student recruitment across campus.
We are concerned about enrollment, particularly now with COVID. We are beginning an "umbrella" program and will become a concentration under Biomedical Sciences major starting Fall 2020 with the hopes of increasing enrollment.

Degree Program Health Is Maintaining - Explanations
Recent turnover and restructure of parent department. Some new faculty some old faculty.
Our program has lost a great number of faculty over the last few years, our biggest hit coming this last year with the loss of long-time faculty members to retirement, other opportunities and a death. As a department we have had to be very strategic with regard to course offerings and everyone has had to pick up additional duties to ensure the health of the program. While we have a strong team, we hope to add an additional faculty over the next year to alleviate some of the stress to the program.
The program is maintaining a good number of EH graduates and they are eventually getting jobs.
We are short a full time faculty member and relying on adjuncts more and more, in addition the university is in a budget crisis and has offered voluntary separation packages to faculty so it is possible that this will affect the program as well.
Our program continues to remain with a steady enrollment and well recognized in the state as the only nationally accredited program in our state.
We have not seen big fluctuations in the enrollment and have been able to maintain the program under present circumstances.
Continuing recruitment efforts while mounting a new public health degree.
Degree Program Health Is Dimensioning - Explanations
Enrollment is dropping.

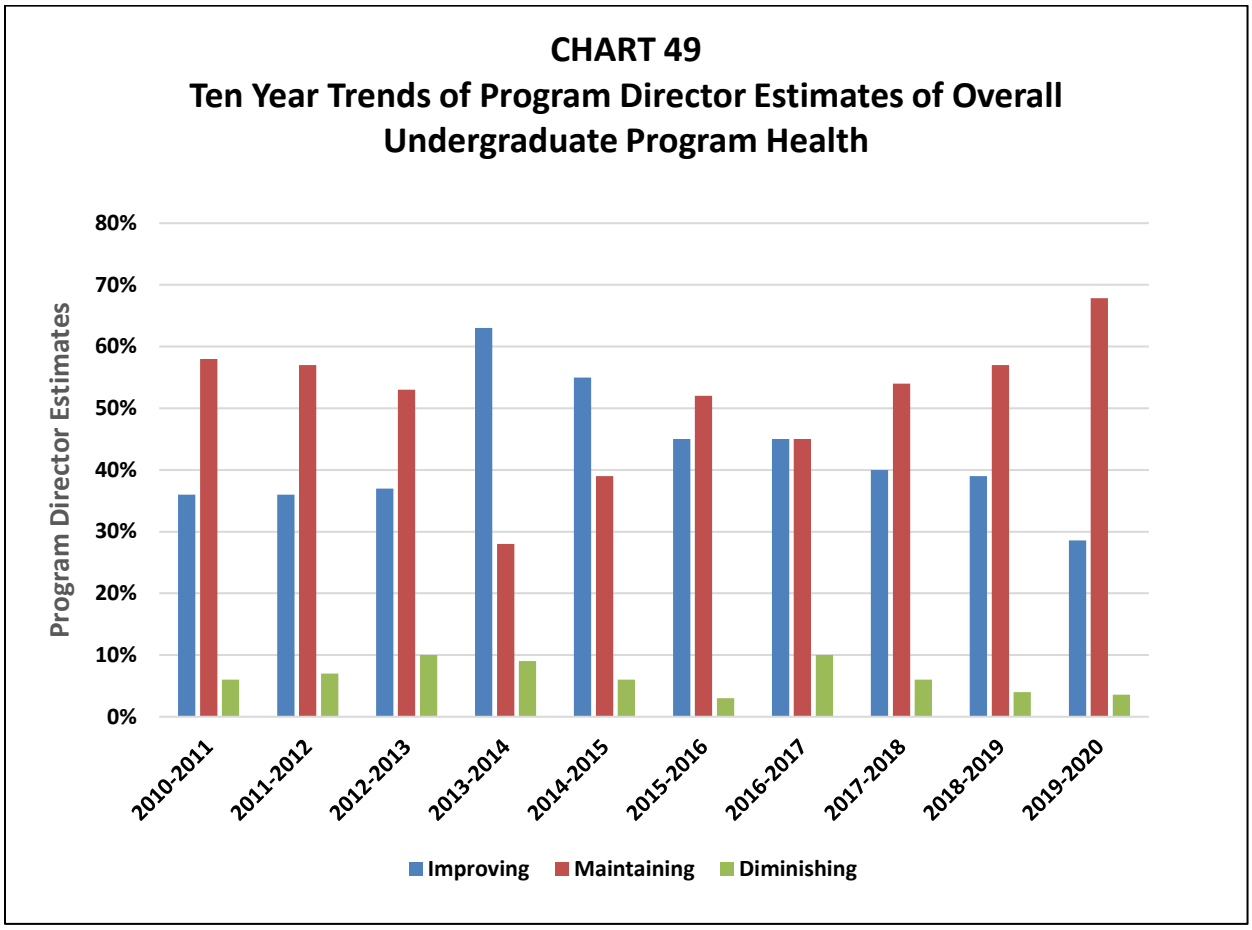
Table 8 presents Graduate Degree Program Director's Degree Program health assessments and explanations for those assessments.

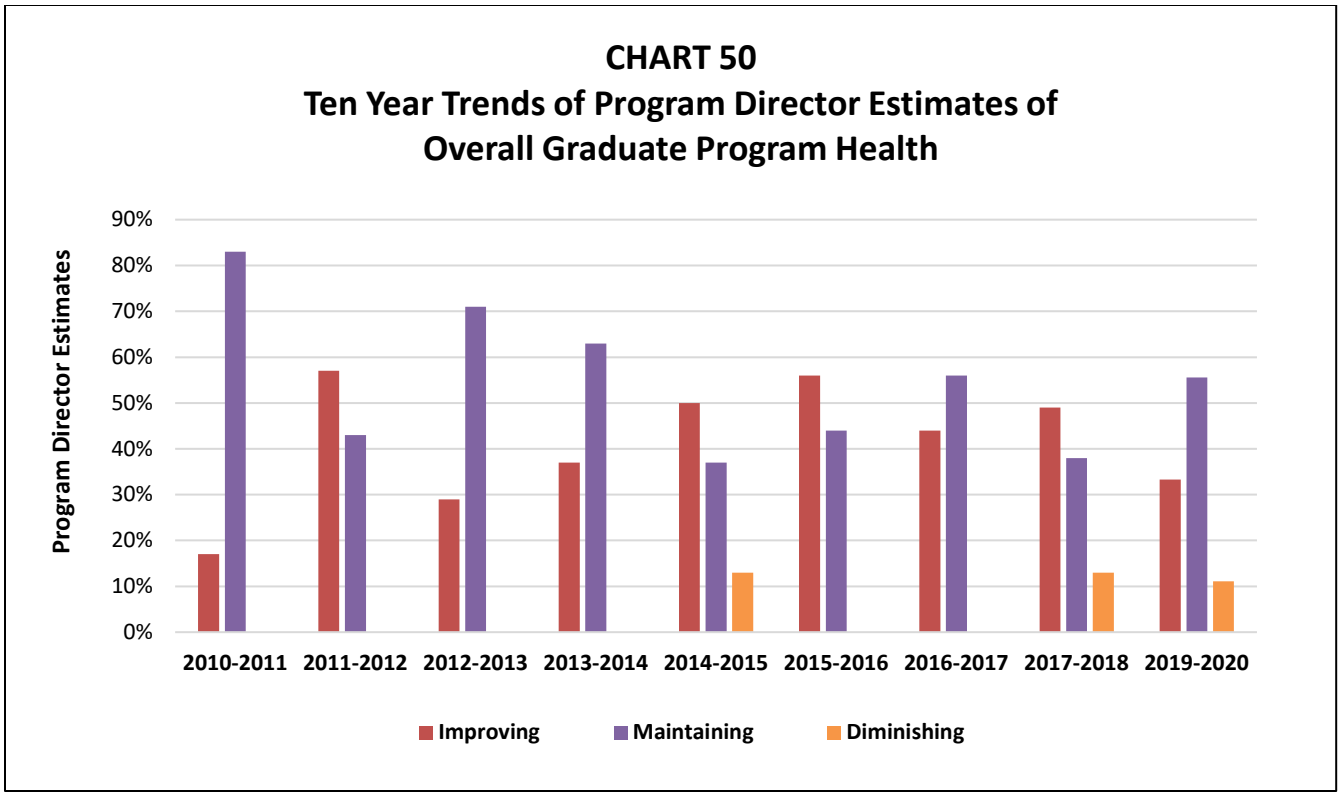
Table 8: Graduate Degree Program Director Assessment of Degree Program Health and Explanations – 2019-2020

Graduate Degree Program Health Assessments and Explanations:
Degree Program Health Improving - Explanations
We have begun to work with the newly developed DrPH program (in the Dept. of Public Health), which may help improve visibility of the MSEH program and possibly help faculty improve funding streams for grant research.
The program has made some positive changes in the recent months (combining the EHS & IH concentrations into one concentration) and a new MPH Director. We are hopeful these recent changes will bring more consistency to the MPH program.
We are creating social marketing campaigns, increasing our web presence, developing systems for tracking students, and being diligent in acquiring grant funding that supports students. This is hopefully working to increase student opportunities and enrollment. This will take at least two more academic years to evaluate. Also, we are participating in strategic assessment of our programs through processes and accreditation.
Degree Program Health Maintaining – Explanations
I feel because we are now in the process of having to try and increase our numbers again, we are maintaining, but I expect that we will soon be increasing our numbers as we have had several new enrollments this term.

We are working on various measures to tackle some pressing issues like enrollment and graduation. Possibly bringing the program to online instruction.
The university has new agreements with international recruiters, and we are seeing more international applications. Domestic recruiting is now being done in house which helps us better understand our potential students' educational needs.
Degree Program Health Diminishing - Explanations
MSEH program is currently suspended. Lack / loss of resources prevents reactivation at this time.

Chart 49 presents the ten-year trend in Degree Program Director estimates of Undergraduate Degree Program health. Charts 49 and 50 show that the majority of Undergraduate and Graduate Degree Program Directors report Degree Programs maintaining or improving during the last ten years.

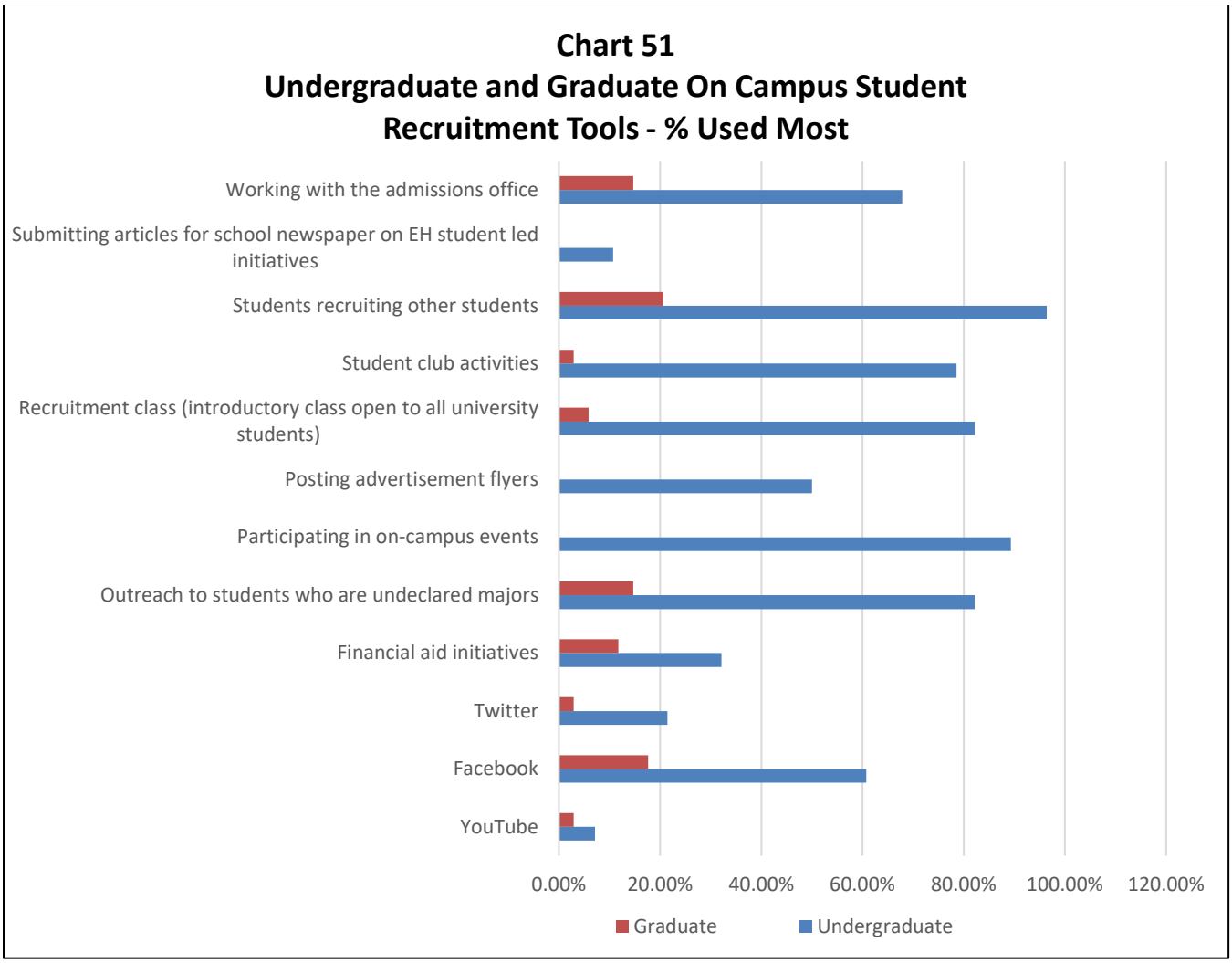




8.0 Recruitment

8.1 On Campus Recruitment

EHAC provided a list of on campus student recruitment techniques for Degree Program Directors to prioritize by their effectiveness. On campus recruitment techniques used by both Undergraduate and Graduate Degree Programs are presented in Chart 51. Social media tools paled in comparison to methods employing face to face contact by both faculty and fellow students. While Facebook was cited as useful by both UG and Graduate Degree Programs, YouTube and Twitter were at the bottom of the list. Future surveys will assess additional social media tool such as Instagram, snapchat, etc.

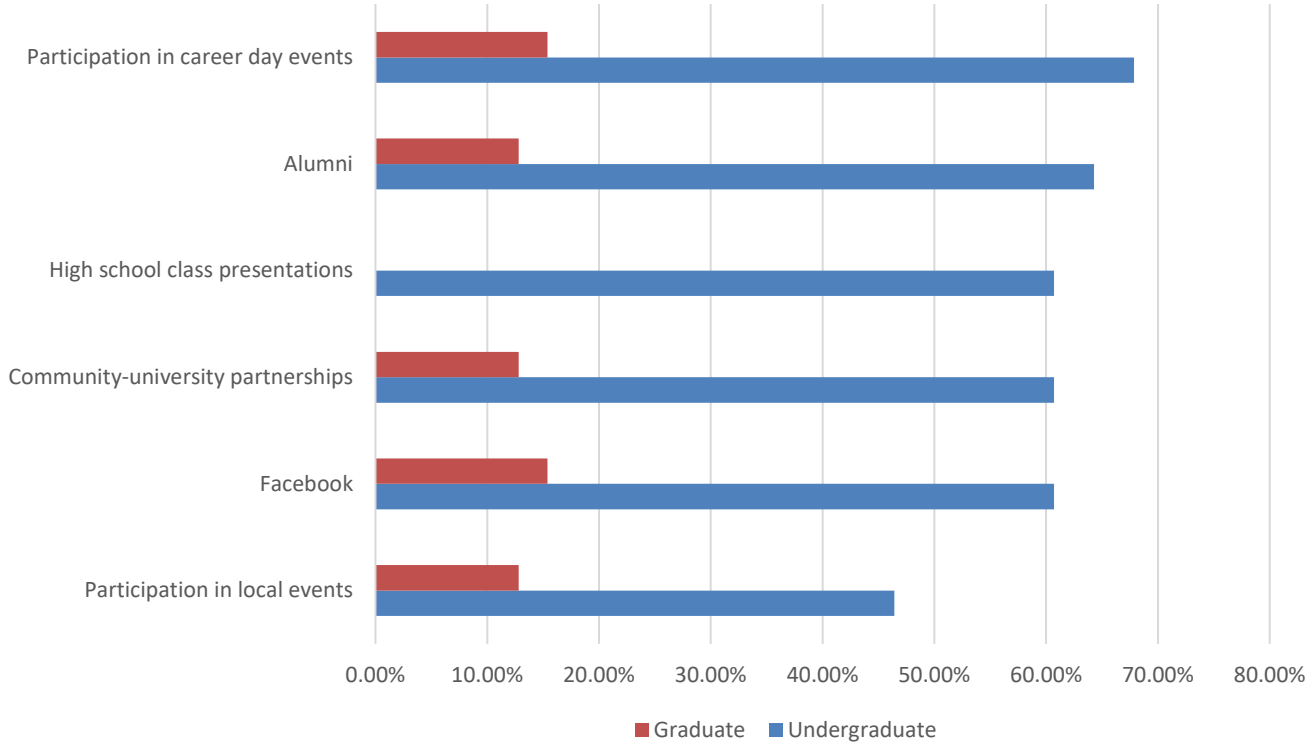


8.2 Off Campus Recruitment

EHAC also provided a list of *off* campus student recruitment techniques for Degree Program Directors to prioritize by their effectiveness. Successful techniques varied between Undergraduate and Graduate Degree Programs for off campus student recruitment. Again, however, the most successful recruiting techniques for both Degree Programs included face to face contact. Social media rose in effectiveness for off-campus recruitment efforts (Chart 52).

Reported information for both Degree Program levels reflects anecdotal evidence supporting the importance of face to face communication with potential recruits, while Facebook proved useful as well.

Chart 52
Off Campus Undergraduate and Graduate Student Recruitment Tools - % Used Most



8.3 Diversity Recruitment

Almost 40% of UG Degree Programs and just over 50% of Graduate Degree Programs are employing diversity recruitment strategies.

9.0 Retention

9.1 Ten-Year Retention Rates

Table 9 depicts the twelve-year average retention rates of accredited Undergraduate and Graduate Degree Programs.

Table 9: Twelve-Year Average Retention Rates at Undergraduate and Graduate Accredited Degree Programs

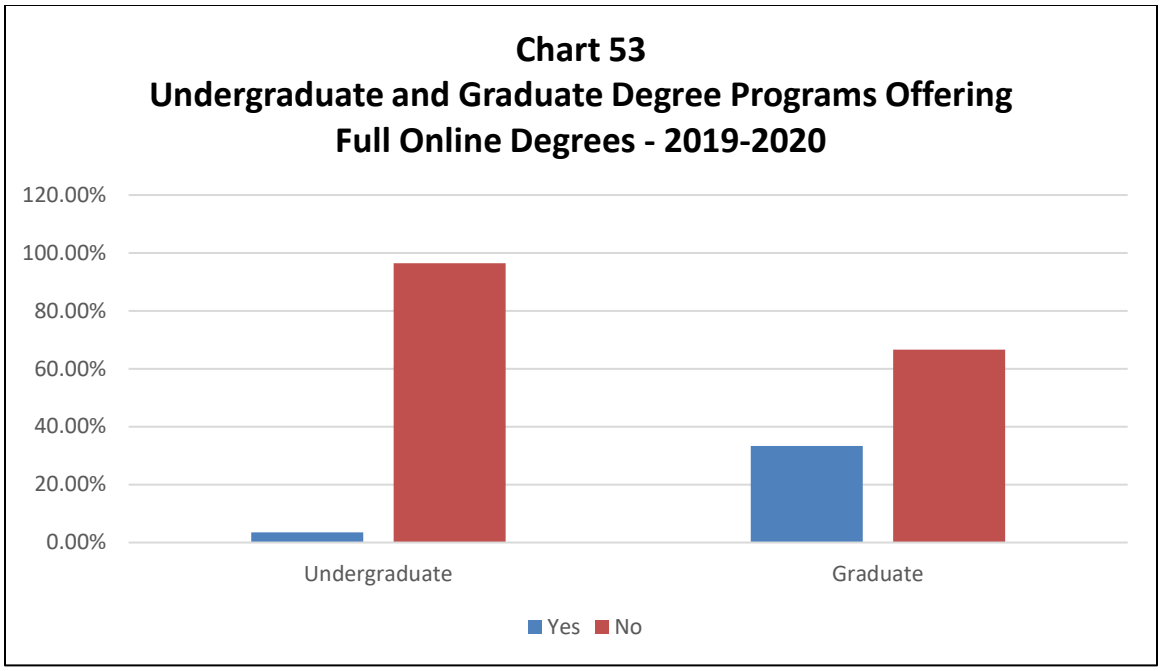
EHAC Accredited Undergraduate Program	2008-2020 Average Enrollment	2008-2020 Average Graduation	2008-2020 Retention Rate
Baylor University	21	4	18.54%
Benedict College	18	3	17.76%
Boise State University	35	7	21.00%
California State University at Northridge	181	49	26.97%
California State University at San Bernardino	177	10	5.79%
Central Michigan University	16	4	26.86%
Colorado State University	90	25	27.53%
East Carolina University	33	5	15.54%
East Central University	43	11	24.51%
East Tennessee State University	42	8	19.16%
Eastern Kentucky University	106	24	22.65%
Illinois State University	89	26	28.71%
Indiana University - Purdue University Indianapolis	22	6	26.72%
Mississippi Valley State University	19	3	16.38%
Missouri Southern State University	49	10	19.83%
Montana State University	20	0	0%
North Carolina Central University	8	0	5.13%
Ohio University	40	9	22.08%
Old Dominion University	64	15	23.69%
State University of New York, ESF	32	8	24.09%
Texas Southern University	34	7	21.29%
University of Findlay	74	16	20.98%
University of Georgia Athens	96	20	20.96%
University of Washington	48	21	43.46%

University of Wisconsin Eau Claire	50	16	32.11%
University of Wisconsin, Osh Kosh	14	3	22.75%
West Chester University	50	11	21.80%
Western Carolina University	64	18	27.83%
Eleven Year Totals	1748	410	
Graduate			
Response	**2008-2020 Average Enrollment**	**2008-2020 Average Graduation**	**2008-2020 Retention Rate**
California State University Northridge	54	24	44.77%
East Carolina University	27	6	23.51%
East Tennessee State University	4	1	19.61%
Eastern Kentucky University	34	13	38.89%
Fort Valley State University	120	40	33.56%
Mississippi Valley State University	18	5	25.71%
University of Findlay	93	28	30.53%
University of Illinois Springfield	33	12	36.18%
Western Kentucky University	19	0	0%
Eleven Year Totals	399	136	

10.0 Online Opportunities

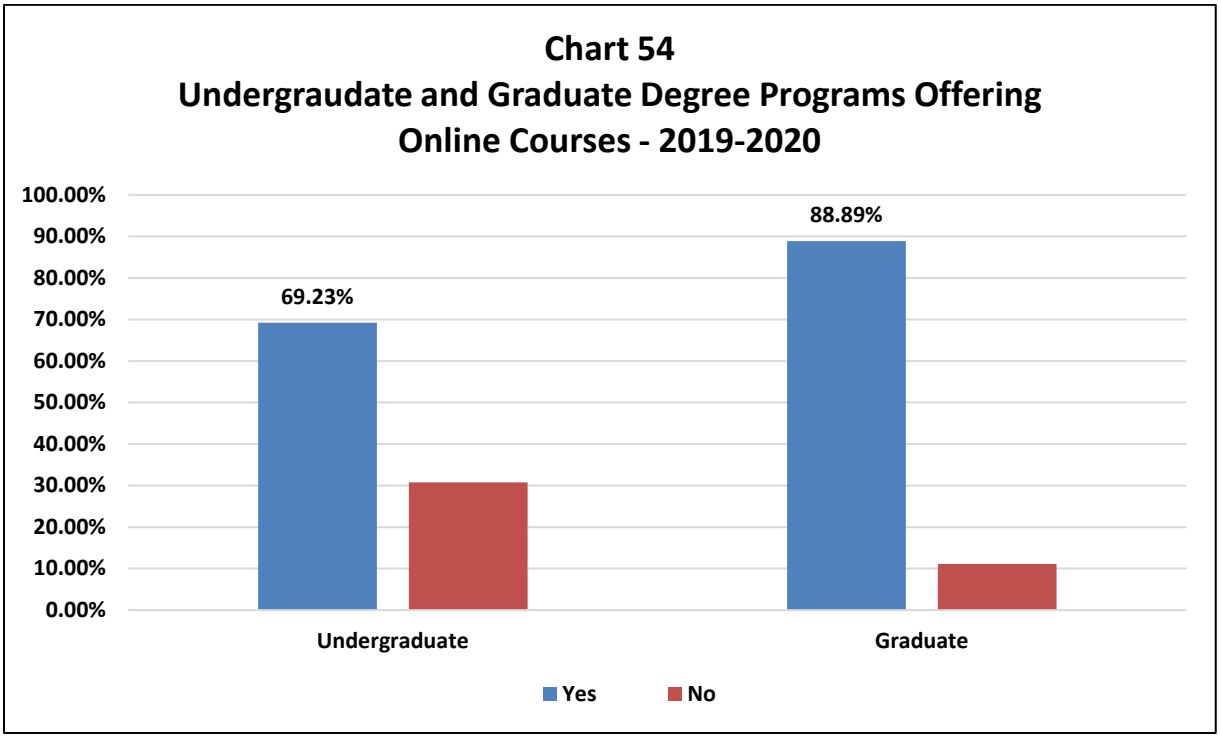
10.1 Full Online Degree Programs

Missouri Southern State University offers a full online Undergraduate degree, while Graduate Degree Programs at East Carolina University, University of Findlay and University of Illinois Springfield have full online Master's Degree Programs. Benedict College, East Central University and University of Findlay's Undergraduate Degree Programs are developing online degrees, while Eastern Kentucky University's Graduate Degree Programs are developing online Master's degrees. Mississippi Valley State University has just initiated an online Master's Degree Program in Environmental Health, as well. Chart 53 presents the distribution of Undergraduate and Graduate Degree Programs offering online degrees.



10.2 Online Courses

Twenty-four of 37 accredited Undergraduate and Graduate Degree Programs offer online courses. Chart 54 presents the distribution of Undergraduate and Graduate Degree Programs offering online courses.



11.0 Exit Exams

Accredited Degree Programs were asked if they administered an exit examination to graduating students. Twenty-one Undergraduate Degree Programs administer an exit exam and seven Graduate Degree Programs require exit exams of their students. This was a significant increase from previous years. Chart 55 presents the eleven-year trend in Undergraduate and Graduate Degree Programs that administer exit exams. Explanations of the purpose of these exit exams are included as well in Tables 10 and 11.

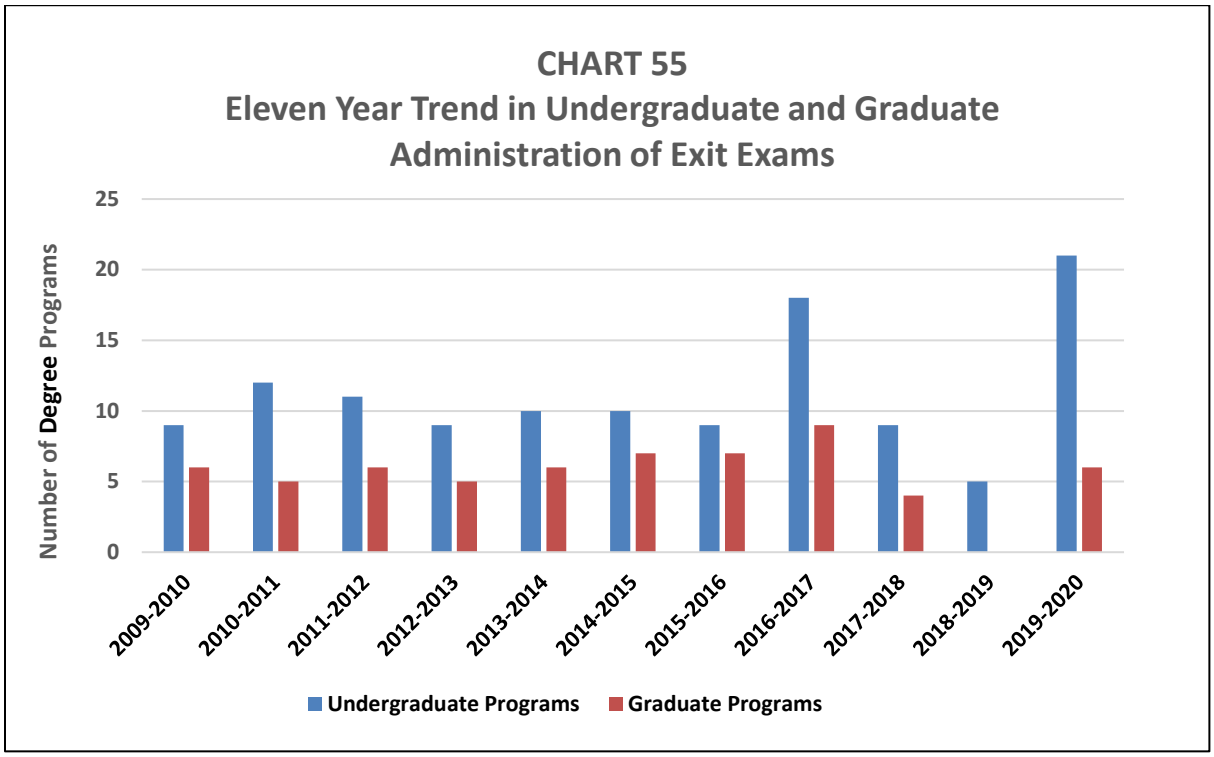


Table 10: Administration of Exit Exams by Accredited Undergraduate Degree Programs – 2019-2020

If Degree Program answered "yes", the focus and purpose of the exam was explained.
Previously administered, but not currently done.
The exit exam is given during the EHS 485 Senior Seminar course in which students review everything that should have been learned in the program which is then featured on the exit exam. The study guide we utilize for this exam is the same one utilized for the state exam. Our students also have the option of taking the state RS exam after graduation at the expense of the department. The exit exam is designed to bring together all the major competencies/learning objectives from the program and prepare our students for the workforce and the state RS exam.
Students will be tested for environmental health knowledge by a comprehensive examination, and internship experience is evaluated by student presentation and a written report.
The Certified Environmental Health Specialist (CEHS) exam by the state Board of Environmental Health Professionals is given. The exam covers information primarily useful in the duties of the Environmental Public Health Specialist employed by health departments.
In the professional topics course, it covers both EH and OHS.

The focus of the Exit Exam is determination of the overall knowledge of graduates after completion of the program. This exam also serves the purpose of determining how well these graduates have meet the overall objectives of the program.
The current exam focuses on all students that graduate from the Department of Biology. It is to collect data about their general education.

Table 11: Administration of Exit Exams by Accredited Graduated Degree Programs – 2019-2020

If Degree Program answered "yes", the focus and purpose of the exam was explained.
Final comprehensive exam is required for graduation. This written exam covers core topics in EH.
It is a comprehensive examination written by faculty.
Graduate students are offered a case study model comprehensive exam that incorporates and test all the EHAC core competencies. Students are also required to submit a written internship report and present as a means of the culminating experience for the EH Master's program.
It is a comprehensive exam of the concepts that were taught during the course of the program
We administer an exit survey over the competencies for our program.