



## Department of Biology

#9 Plan cycle - 9

Plan cycle 2023/2024

7/1/23 - 6/30/24

## **Introduction**

The purpose of the Department of Biology is to provide high school graduates of southwest Louisiana and two-year college transfer students with the knowledge and skills required for employment in their allied health disciplines or advanced study in graduate or professional schools, to advance knowledge through scientific research and serve the disciplines within the department through professional activities, to serve the community in matters relating to the disciplines within the department, and to provide instructional services to students in other areas of study within the University.

## 1 Assessment and Benchmark

Prior to 2018-2019, the benchmark was track student enrollments at each level for the BS in Biological Science program. Maintain or exceed 2013-2014 levels of declared majors:

- BIOL - BS Biological Science
  - BIED - Biology Education Grades 6-12
  - MOBI - Molecular Biology
  - PPHA - Pre-Pharmacy
  - PRDN - Pre-Dentistry
  - PRMD - Pre-Medicine

## 1.1 Data

Major	Conc.	Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
BIOS	BIED	4	2	0	1	7	0	2	2	0	1	5	1
	MOBI	1	5	6	5	17	2	0	6	2	7	15	1
	PPHA	19	6	3	1	29	0	7	6	3	2	18	0
	PRDN	15	4	7	1	27	0	13	3	4	1	21	0
	PRMD	69	54	31	34	188	1	41	40	41	36	158	6
	(blank)	21	19	13	33	86	8	15	25	19	32	91	10
Grand Total		129	90	60	75	354	11	78	82	69	79	308	21

Major	Conc.	Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
BIOS	BIED	4	3	1	0	8	0	4	3	1	0	8	0
	MOBI	4	2	2	7	15	1	2	1	4	6	13	4
	PPHA	13	7	2	3	25	0	5	7	4	4	20	0
	PRDN	8	9	4	4	25	1	5	6	7	2	20	2
	PRMD	63	47	40	36	186	2	36	40	27	42	145	14
	(blank)	21	19	28	39	107	8	13	13	20	46	92	12
<b>Grand Total</b>		<b>113</b>	<b>87</b>	<b>77</b>	<b>89</b>	<b>366</b>	<b>12</b>	<b>65</b>	<b>70</b>	<b>63</b>	<b>100</b>	<b>298</b>	<b>30</b>

[illegible]

	PRMD	55	31	32	34	152	7	25	26	27	31	109	11
	(blank)	18	12	25	43	98	8	12	17	24	42	95	18
<b>Grand Total</b>		<b>97</b>	<b>53</b>	<b>75</b>	<b>88</b>	<b>313</b>	<b>17</b>	<b>50</b>	<b>53</b>	<b>59</b>	<b>92</b>	<b>254</b>	<b>34</b>

2022-2023:

Major	Conc.	Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
BIOS	BIED	3	1	0	3	7	0	3	0	1	2	6	1
	GBIO	14	9	1	6	30	0	10	11	3	8	32	0
	MOBI	2	0	0	7	9	1	3	0	0	7	10	2
	PPHA	4	7	3	5	19	2	4	6	2	6	18	0
	PRDN	19	8	2	4	33	1	9	10	3	3	25	2
	PRMD	50	30	20	34	134	3	24	29	17	29	99	16
	(blank)	4	6	16	30	56	6	0	8	11	30	49	8
<b>Grand Total</b>		<b>96</b>	<b>61</b>	<b>42</b>	<b>89</b>	<b>288</b>	<b>13</b>	<b>53</b>	<b>64</b>	<b>37</b>	<b>85</b>	<b>239</b>	<b>29</b>

2023-2024:

Major	Conc.	Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
BIOS	BIED	1	1	1	1	4	0	0	1	0	1	2	1
	GBIO	15	10	12	12	49	1	14	8	17	10	49	1
	MOBI	6	1	0	3	10	1	4	0	3	4	11	2
	PPHA	8	4	5	6	23	1	5	4	5	4	18	1
	PRDN	15	6	3	3	27	0	10	4	5	3	22	2
	PRMD	38	28	17	18	101	5	20	13	27	17	77	8
	(blank)	0	4	6	27	37	5	0	0	5	26	31	11
<b>Grand Total</b>		<b>83</b>	<b>54</b>	<b>44</b>	<b>70</b>	<b>251</b>	<b>13</b>	<b>53</b>	<b>30</b>	<b>62</b>	<b>65</b>	<b>210</b>	<b>39</b>

Percentage Change between 2018-2019:

Major	Fall	Total	% Change
BIOS	2018	326	8.589%
	2019	354	
<b>Total</b>	<b>2018</b>	<b>326</b>	<b>8.589%</b>
	<b>2019</b>	<b>354</b>	

Percentage Change between 2019-2020:

Major	Fall	Total	% Change
BIOS	2019	354	3.389%
	2020	366	
<b>Total</b>	<b>2019</b>	<b>354</b>	<b>3.389%</b>
	<b>2020</b>	<b>366</b>	

## Percentage Change between 2020-2021:

Major	Fall	Total	% Change
BIOS	2020	366	-14.480%
	2021	313	
<b>Total</b>	<b>2020</b>	<b>366</b>	<b>-14.480%</b>
	<b>2021</b>	<b>313</b>	

## Percentage Change between 2021-2022:

Major	Fall	Total	% Change
BIOS	2021	313	-7.987%
	2022	288	
<b>Total</b>	<b>2021</b>	<b>313</b>	<b>-7.987%</b>
	<b>2022</b>	<b>288</b>	

## Percentage Change between 2022-2023:

Major	Fall	Total	% Change
BIOS	2022	288	-12.847%
	2023	251	
<b>Total</b>	<b>2022</b>	<b>288</b>	<b>-12.847%</b>
	<b>2023</b>	<b>251</b>	

**1.1.1 Analysis of Data and Plan for Continuous Improvement**

## 2019-2020:

Enrollment in Fall 2019 showed an increase of 28 more students than Fall 2018 and is the highest enrollment total since Fall 2013; Spring 2020 also had an increase of 23 more students than Spring 2019 and is the highest enrollment total since Spring 2013. PRMD continues to have the highest number of students. This year PRMD was followed by PPHA. Currently, PPHA schools have a high acceptance rate which may be driving this increase. There was a slight decrease in PRDN and MOBI (-4 and -9, respectively). Since 2013-2014, the numbers of completers have fluctuated from year to year; numbers of completers were relatively low in 2013-2014 and 2015-2016 whereas the number of completers were relatively high in 2014-2015, 2016-2017, 2017-2018, 2018-2019, and again this year (2019-2020). The department continues recruitment in the pre-health professions, has a Fall Convocation for PRMD students, engaging faculty advisors from PRMD, PPHA and PRDN, an active Retention/Recruitment Committee and a Public Relations Committee for disseminating department information.

## 2020-2021:

Enrollment in Fall 2020 increased by 12 (3.4%) as compared to Fall 2019 while Spring 2021 enrollment decreased by 10. We did not meet our goal. PRMD continues to have the highest number of students. This year PRMD was followed by no concentration, PPHA, and PRDN. There was a slight decrease in PPHA, PRDN, and MOBI (-4, -2, and -2 respectively). The number of completers increased by 10 students (31%) as compared to the 2019-2020 academic year. The department continues recruitment in the pre-health professions, has a Fall Convocation for PRMD students, engaging faculty advisors from PRMD, PPHA and PRDN, an active Retention/Recruitment Committee and a Public Relations Committee for disseminating department information.

## 2021-2022:

Enrollment in Fall 2021 decreased by 53 (14.48%) as compared to Fall 2020 and Spring decreased by 44 (14.8%). We did not meet our goal. Once again, PRMD had the highest enrollment followed by no

concentration, PRDN, and PPHA. There was a slight increase in PPHA (12%) and PRDN (3.8%) enrollment during the Fall 2021 semester as compared to the previous fall. The 2021-2022 academic year had 41 completers, which is higher than the previous 6 years. The department continues recruitment in the pre-health professions, has a Fall Convocation for PRMD students, engaging faculty advisors from PRMD, PPHA and PRDN, an active Retention/Recruitment Committee and a Public Relations Committee for disseminating department information.

#### 2022-2023:

Enrollment in Fall 2022 decreased by 25 (7.99%) as compared to Fall 2021 and Spring decreased by 15 (5.91%). We did not meet our goal. In Fall 2022, PRMD had the highest enrollment followed by PRDN, GenBio, and PPHA. There was an increase in BioED (28.6%) and PRDN (21.2%) enrollment during the Fall 2022 semester as compared to the previous fall. The 2022-2023 academic year had 42 completers, one more than the previous year. The department continues recruitment in the pre-health professions, has a Fall Convocation for PRMD students, engaging faculty advisors from PRMD, PPHA and PRDN, an active Retention/Recruitment Committee and a Public Relations Committee for disseminating department information. During the 2023-2024 academic year, the department will provide opportunities for high school science classes in the five parish area to perform science experiments at the university.

#### 2023-2024:

Enrollment in Fall 2023 decreased by 37 (12.8%) as compared to Fall 2022 and Spring decreased by 29 (12.1%). We did not meet our goal. In Fall 2023, PRMD had the highest enrollment followed by PRDN, GenBio, and PRDN. There was an increase in GBIO (63.3%), MBIO (11.1%) and PPHA (21.1%) enrollment during the Fall 2023 semester as compared to the previous fall. The 2022-2023 academic year had 52 completers, 10 more than the previous year. The department continues recruitment in the pre-health professions, has a Fall Convocation for PRMD students, engaging faculty advisors from PRMD, PPHA and PRDN, an active Retention/Recruitment Committee, and a Public Relations Committee for disseminating department information. During the 2023-2024 academic year, the department provided opportunities for high school science classes in the five-parish area to perform science experiments at the university, but only one high school took part. We will continue our attempt to interact with high school science classes for the next academic year.

## 2 Assessment and Benchmark

Benchmark: Increase graduate enrollment and completers in each concentration.

- ECSB - Environmental and Chemical Sciences
  - INBI - Integrative Biology

### 2.1 Data

Graduate Enrollment:

Major	Conc.	2018-2019			2019-2020			2020-2021			2021-2022			2022-2023		
		U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
ECSB	INBI	0	3	4	3	7	8	1	6	3	0	4	5	0	8	7

Major	Conc.	2023-2024			2024-2025			2025-2026			2026-2027			2027-2028		
		U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
ECSB	INBI	1	7	5												

Graduate Completers:

Major	Conc.	2018-2019			2019-2020			2020-2021			2021-2022			2022-2023		
		U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
ECSB	INBI	0	0	0	0	0	3	0	0	0	0	1	0	0	1	1

Major	Conc.	2023-2024			2024-2025			2025-2026			2026-2027			2027-2028		
		U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
ECSB	INBI	0	1	2												

### 2.1.1 Analysis of Data and Plan for Continuous Improvement

2019-2020:

INBI concentration began in Fall 2018. Three students graduated this Spring. Data show a 100% increase in graduate students between Spring 2018-2019 and 2019-2020.

2020-2021:

Enrollment in the INBI concentration decreased in the 2020-2021 academic year as compared to the 2019-2020 year. In addition, we did not have any students graduate from the program in the 2020-2021 academic year. This benchmark was not met. This is likely due to the pandemic and hurricanes. Graduate level courses are difficult to teach online due to the heavy amount of critical thinking and data analysis involved. We will continue to promote our graduate program with colleagues at other universities as well as in our own undergraduate courses within the department.

2021-2022:

Enrollment in the INBI concentration dropped by three students in the 2022-2023 academic year. This benchmark was not met. Three students completed the degree over the past academic year. This benchmark was met. We have two new incoming graduate students for the next academic year. Enrollment in the INBI concentration remained fairly constant from the 2020-2021 to 2021-2022 academic years. This benchmark was not met. One student completed the degree over the past academic year. This benchmark was met. Now that we are having face-to-face classes and research is once again being performed, we are actively recruiting students to the graduate program for the next academic year.

2022-2023:

Enrollment in the INBI concentration doubled to eight students in the 2022-2023 academic year. This benchmark was met. Two students completed the degree over the past academic year. This benchmark was met. Now that we are having face-to-face classes and research is once again being performed, enrollment in the program doubled. We are actively recruiting students to the graduate program for the next academic year.

2023-2024:

Enrollment in the INBI concentration decreased by one student in the 2023-2024 academic year (comparing fall to fall). This benchmark was not met. Three students completed the degree over the past academic year. This benchmark was met. We have 2-3 new incoming graduate students starting this fall. We are continuing to recruit and accept students to the graduate program for the next academic year.

## 3 Assessment and Benchmark

Benchmarks:

- A persistence rate (students retained from Fall Y1 to Spring Y1) of 85%.
- A retention rate of 70% from Y1 to Y2.
- A retention rate of 55% from Y1 to Y3.
- A retention rate of 45% from Y1 to Y4.
- A 4-year graduation rate of 35%.
- A 5-year graduation rate of 40%.
- A 6-year graduation rate of 45%.

Major:

- BIOS - Bachelor of Science in Biological Science

### 3.1 Data

**Fall 2012 Cohort:**

## Major Retention

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	89*	53	59.6	29	32.6	17	19.1	14	15.7	13	14.6	13	14.6	13	14.6

\*3 students were previously undeclared before declaring BIOS.

**Fall 2013 Cohort:**

## Major Retention

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	92*	65	70.7	43	46.7	31	33.7	24	26.1	18	19.6	20	21.7	20	21.7

\*2 students were previously undeclared before declaring BIOS.

**Fall 2014 Cohort:**

## Major Retention

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	89	53	59.6	38	42.7	21	23.6	18	20.2	9	10.1	15	16.8	16	17.9

**Fall 2015 Cohort:**

## Major Retention

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	124	87	69.4	58	46.8	35	28.2	25	20.2	17	13.7	21	16.9	21	16.9

**Fall 2016 Cohort:**

## Major Retention

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	98	60	61.2	37	37.8	21	21.4	17	17.3	12	12.2	16	16.3	16	16.3

**Fall 2017 Cohort:**



Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	130	96	73.8	63	48.5	45	34.6	34	26.2	23	17.7	29	22.3	30	23.1

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	115	79	68.7	58	50.4	39	33.9	31	27.0						

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	117	87	74.4	66	56.4	47	40.2	35	29.9						

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	110	84	76.3	48	43.6	30	27.3	24	21.8						

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	84	51	60.7	40	47.6	21	25.0								

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	

		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	83	57	68.7	38	45.8										

**Fall 2023 Cohort:**

## Major Retention

Major	Cohort Size	Persistence Rate		Retention Rate						Graduation Rate					
				Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
BIOS	73	52	71.2												

**Summary of Persistence, Retention, and Graduation Rates:**

Fall Cohort	Cohort Size	Persistence Rate	Retention Rate						Graduation Rate		
			Y1 to Y2	Y1 to Y3	Y1 to Y4	4-Year	5-Year	6-Year			
2012	89	59.6	32.6	19.1	15.7	14.6	14.6	14.6			
2013	92	70.7	46.7	33.7	26.1	19.6	21.7	21.7			
2014	89	59.6	42.7	23.6	20.2	10.1	16.8	17.9			
2015	124	69.4	46.8	28.2	20.2	13.7	16.9	16.9			
2016	98	61.2	37.8	21.4	17.3	12.2	16.3	16.3			
2017	130	73.8	48.5	34.6	26.2	17.7	22.3	23.1			
2018	115	68.7	50.4	33.9	27.0						
2019	117	74.4	56.4	40.2	29.9						
2020	110	76.3	43.6	27.3	21.8						
2021	84	60.7	47.6	25.0							
2022	83	68.7	45.8								
2023	73	71.2									
<b>Average</b>	<b>100.3</b>	<b>67.9</b>	<b>45.4</b>	<b>28.7</b>	<b>22.7</b>	<b>14.7</b>	<b>18.1</b>	<b>18.4</b>			

**3.1.1 Analysis of Data and Plan for Continuous Improvement**

2019-2020:

The persistence rate benchmark was met. The 8-year average is over 90%, There was a 4% increase over 2018 and is the highest since 2013.

The retention rate benchmark for Y1 to Y2 was met. The percentage rate slightly decreased in 2018.

Fluctuations will be monitored to discern data trends. Since only two data sets are complete a continual review is required. Since before and including 2018, the average rate for the previous 7 years was 76.4% which is a slight decrease from previous years.

The retention rate benchmark for Y1 to Y3 was met. Since before and including 2017, the average rate for the previous 6 years was 63.4% which is a slight increase from previous years.

The retention rate benchmark for Y1 to Y4 was met. Since before and including 2015, the average rate for the previous 5 years was 53.4% which is a slight decrease from previous years.

For the cohort starting in 2013, no benchmarks were met. Outreach and engagement efforts continue to be under review to address this situation. Of the complete cohorts, the difference between Y1 to Y2 and Y1 to Y4, for 2016 and 2015 were the same and the highest of the analyzed years.

**2020-2021:**

The persistence rate benchmark was met. The 8-year average is 90%, There was a 4% decrease over 2019.

The retention rate for Y1 to Y2 was 86.3%. This benchmark was met. The retention rate for the previous year was 70.4% resulting in a 15.9% increase over the past year. For the previous 7 years, the average Y1 to Y2 retention rate was 76.4%. Therefore, the current year has a 9.9% increase in retention over the previous 7 years.

The retention rate of Y1 to Y3 was 65.2% with this benchmark being met. This was a 4% decrease as compared to the previous year. The average of the 6 previous years was 63.4%. Therefore, the current years Y1 to Y3 retention rate is 1.8% higher than the previous 6 years.

The retention rate of Y1 to Y4 was 68.5%. This benchmark was met. This was a 19.6% increase over the previous year. The average of the 5 previous years was 53.4%. Therefore, the current years Y1 to Y4 retention rate is 15.1% higher than the previous 6 years. This is the highest Y1 to Y4 retention rate in the chart.

The 2013 cohort did not meet the benchmark for the 4, 5, or 6-year graduation rate. The 2014 cohort reached the benchmark for the 5 and 6-year graduation rate, but did not meet the benchmark for the 4-year graduation rate. The 2013 year had extremely low graduation marks. Data from 2014 is more inline with the data from 2012. Faculty outreach and engagement will be encouraged to improve the 4-year benchmark.

**2021-2022:**

The persistence rate benchmark was met. The 8-year average is 91%, There was a 0.7% decrease over 2019.

The retention rate for Y1 to Y2 was 77.2%. This benchmark was met. The retention rate for the previous year was 86.3% resulting in a 9.1% decrease over the past year. For the previous 7 years, the average Y1 to Y2 retention rate was 76.7%. Therefore, the current year has a 0.5% increase in retention over the previous 7 years.

The retention rate of Y1 to Y3 was 71.8% with this benchmark being met. This was a 6.6% increase as compared to the previous year. The average of the 6 previous years was 63.4%. Therefore, the current years Y1 to Y3 retention rate is 8.4% higher than the previous 6 years.

The retention rate of Y1 to Y4 was 53.1%. This benchmark was met. This was a 15.4% decrease over the previous year. The average of the 5 previous years was 53.4%. Therefore, the current years Y1 to Y4 retention rate is 0.3% higher than the previous 6 years.

The 2014 cohort did not reach the benchmark for the 4-year graduation rate, but did reach the benchmark for 5- and 6-year graduation rates. The 2015 cohort did not reach any of the graduation rate benchmarks. The 2015 4-year graduation rate improved 0.7% over the 2014 cohort, but 5- and 6-year graduation rates decreased by 0.9% and 6.4% respectively. Faculty outreach and engagement will be encouraged to improve the 5- and 6-year benchmarks.

**2022-2023:**

The persistence rate for the academic year was 68.7%. This benchmark was not met. This was an 11.6% increase over 2021.

The retention rate for Y1 to Y2 was 47.6%. This benchmark was not met. For the previous 7 years, the average Y1 to Y2 retention rate was 46.6%. Therefore, the current year has a 2.1% increase in retention over the previous 7 years.

The retention rate of Y1 to Y3 was 27.3% with this benchmark not being met. This was a 32.1% decrease as compared to the previous year. The average of the 6 previous years was 30.3%. Therefore, the current

years Y1 to Y3 retention rate is 9.9% less than the previous 6 years.

The retention rate of Y1 to Y4 was 29.9%. This benchmark was not met. This was a 9.7% increase over the previous year. The average of the 5 previous years was 22.18%. Therefore, the current years Y1 to Y4 retention rate is 25.8% higher than the previous 5 years.

Neither the 2015 nor the 2016 cohort reached the benchmark for the 4- 5- and 6- year graduation rates. The 2016 4-year graduation rate decreased 10.9% over the 2015 cohort, and the 5- and 6-year graduation rates decreased by 3.6% each. Faculty outreach and engagement will be encouraged to improve the 5- and 6-year benchmarks.

2023-2024:

The persistence rate for the academic year was 71.2%. This benchmark was not met. This was a 3.3% increase over the average of the last 12 years.

The retention rate for Y1 to Y2 was 45.8%. This benchmark was not met. For the previous 11 years, the average Y1 to Y2 retention rate was 45.4%. Therefore, the current year has a 0.4% increase in retention over the last 11 years.

The retention rate of Y1 to Y3 was 25.0% with this benchmark not being met. This was a 3.7% decrease as compared to the average of the last ten years.

The retention rate of Y1 to Y4 was 21.8%. This benchmark was not met. This was a 0.9% decrease as compared to the average of the last nine years.

The 2017 cohort did not reach the benchmark for the 4- 5- and 6- year graduation rates. The 2017 4-year graduation rate increased 3%, the 5-year graduate rate increased by 4.2%, and the 6-year graduation rate increased by 4.7% over the average rates for the last 6 years.

A Biology Foundations course was added to the curriculum starting in the 2023-2024 academic year for incoming freshman Biology majors in an attempt to prevent students from exiting the University during their first two semesters. We will need to collect more data to see if this is having an effect on retention rates. Faculty outreach and engagement will be encouraged to improve all benchmarks.

## **Performance Objective 2 Engage in collaborative ventures and campus and community activities which enhance economic development, cultural and artistic growth, and or educational experiences for the SWLA region and beyond.**

### **1 Assessment and Benchmark**

Benchmark: All faculty will serve on department committees, and 60% will serve on college and university committees.

Prior to 2021-2022, the benchmark was all faculty will serve on department committees, and 50% will serve on college and university committees.

#### **1.1 Data**

Year	Faculty that served on departmental committees		Faculty that served on college/university committees	
	#	%	#	%
2016	—	100%	8/13	62%
2017	—	100%	8/13	62%
2018	13/13	100%	9/13	69%
2019	13/13	100%	9/13	69%
2020	14/14	100%	10/14	71%

Academic Year	Faculty that served on departmental committees		Faculty that served on college/university committees	
	#	%	#	%
2020-2021	14/14	100%	10/14	71%
2021-2022	14/14	100%	10/14	71%
2022-2023	12/12	100%	8/12	67%
2023-2024	12/12	100%	7/12	58%

[2017 Committee Assignments](#) [DOCX 15 KB 2/20/20]

### 1.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

The departmental service activities benchmark is met.

The college/university service activities benchmark is met. During departmental meetings and at other times appropriate, the importance of serving on college/university committees and reasons for taking advantage of opportunities to serve on such committees will be discussed with/presented to faculty. We will continue to use this benchmark since additional faculty have been added and personnel changes may occur, especially considering COVID-19 Pandemic and impacts from the recent hurricanes.

2020-2021:

The departmental service activities benchmark is met.

The college/university service activities benchmark is met. The benchmark should be raised to 60%. This is still below the levels that we have achieved over the years, but we will have personnel changes over the next few years due to retirements and hopefully new hires.

2021-2022:

The departmental service activities benchmark is met.

The college/university services activities benchmark is met. It was suggested last year that the benchmark be changed to 60%. We have met this updated benchmark as well. We have had two faculty retire at the end of this academic year and will be hiring a new faculty member. This will have an effect of next years data since both retiring faculty were on college/university committees. We will keep the 60% benchmark.

2022-2023:

The departmental service activities benchmark is met.

The college/university services activities benchmark is met. We have hired a new faculty member for the Fall semester, and some faculty will be rotating off of Faculty Senate. This will have an effect on next year's data. We will keep the 60% benchmark.

2023-2024:

The departmental service activities benchmark is met.

The college/university services activities benchmark was not met. There was a 9% decrease in the number of faculty on college/university committees. As predicted in last year's assessment, one faculty member rotated off of faculty senate and the new faculty member has not been appointed to any of these committees resulting in a lower assessment value. We will be losing the new faculty member in the 2024-2025 academic year and will be adding a temporary instructor.

## 2 Assessment and Benchmark

Benchmark: 80% of the faculty will serve as resource persons for the community.

Prior to 2018-2019, the benchmark was 50%.

### 2.1 Data

2019:

Four (30.8%) of the faculty declared serving as resource persons for the community (e.g., plant and animal identification, science fair judging, community workshops, and biological consultation). Ten (76.9%) typically have served as a community resource. This objective was not met.

2020:

Four (28.6%) of the faculty declared serving as resource persons for the community (e.g., plant and animal identification and biological consultation). Eleven (78.6%) would typically have served as a community resource, but the current COVID-19 pandemic and recent hurricanes have affected societal engagement opportunities. This objective was not met.

2020-2021:

One (7.1%) faculty member declared serving as a resource person for the community. This objective was not met.

2021-2022:

Six (50%) faculty members declared serving as a resource person for the community. This objective was not met.

2022-2023:

Seven (58%) faculty members declared serving as a resource person for the community. This objective was not met.

2023-2024:

Ten (83%) faculty members served as a resource person for the community this academic year. This objective was met.

### **2.1.1 Analysis of Data and Plan for Continuous Improvement**

2020:

Community requests for professional expertise (e.g., consultation, etc.) fluctuate. Faculty who typically are asked for community service/support/consultation will be reminded to document their service. Community-based workshops serve as a resource for local citizens vs. individual consultation. As mentioned previously, after the pandemic, we hope to conduct public forum presentations. Contacts have been made with public venues for hosting these forums; however, the current situation continues to limit any on-site personal interaction.

2020-2021:

Many community events that faculty would participate were not held during the past year due to social distancing requirements. As more events begin to be held, faculty will be able to continue in their assistance to the community.

2021-2022:

Faculty members are beginning to become more involved with assisting the community as pandemic measures ease. In addition, the presence of the science fair on McNeese grounds this year allowed for greater faculty participation. Faculty will be encouraged to increase their involvement in community assistance as needed.

2022-2023:

Faculty members are beginning to become more involved with assisting the community. Starting in Fall 2024, the department will have 2 experiments available for high school teachers to bring students to McNeese to participate. This will allow faculty members more interactions with high school students.

2023-2024: There was a 25% increase in community activities over the previous year. At the beginning of the academic year, faculty were encouraged to engage in more community outreach. Faculty members participated in health and fauna of Louisiana presentations at public libraries and workshops/experiments with K-12 students both on campus and at local schools. This will continue to be one of the department's initiatives in the next academic year.

## **3 Assessment and Benchmark**

Benchmark: The department will enter into a collaborative agreement with a government agency in Calcasieu Parish.

### 3.1 Data

2019:

The department has continued its partnership with the City of Lake Charles at Tuten Park. Ms. Danielle Maxwell is currently chair of the Tuten Park Committee. New faculty have been added to this committee. The department also is involved with the Master Naturalist Program coordinated with Calcasieu Parish Parks and LA Wildlife and Fisheries. Outreach efforts by faculty have produced news clips on KPLC-TV, etc.

2020:

The department has continued its partnership with the City of Lake Charles at Tuten Park. Ms. Danielle Maxwell is currently chair of the Tuten Park Committee with three faculty members. New faculty have been added to this committee. The department also is involved with the Master Naturalist Program coordinated with Calcasieu Parish Parks and LA Wildlife and Fisheries. On-site partnering has been affected by COVID-19 Pandemic and recent hurricanes.

2020-2021:

The department has continued its partnership with the City of Lake Charles at Tuten Park. Ms. Danielle Maxwell is currently chair of the Tuten Park Committee with three faculty members. New faculty have been added to this committee. The department also is involved with the Master Naturalist Program coordinated with Calcasieu Parish Parks and LA Wildlife and Fisheries. On-site partnering has been affected by COVID-19 Pandemic and recent hurricanes.

2021-2022:

The department is involved with the Master Naturalist Program coordinated with Calcasieu Parish Parks and LA Wildlife and Fisheries.

2022-2023:

The department is involved with the Master Naturalist Program coordinated with Calcasieu Parish Parks and LA Wildlife and Fisheries. We will also contact the public library to see if they are interested in professors becoming involved with seminars or workshops.

2023-2024:

The department continues its involvement with the Master Naturalist Program coordinated with Calcasieu Parish Parks and LA Wildlife and Fisheries. Faculty have also given three health seminars and three seminars on Louisiana fauna at parish libraries.

#### 3.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

The department will continue its involvement with Tuten Park, the Master Naturalist Program, and other biology-associated community/outreach programs. Until COVID-19 Pandemic and recent hurricanes devastated SWLA, contacts with local government television channels and libraries for seminars as well as other community-based workshops/seminars were being considered. These efforts currently are "on hold."

2020-2021:

The department will continue its involvement with Tuten Park, the Master Naturalist Program, and other biology-associated community/outreach programs. Until COVID-19 Pandemic and recent hurricanes devastated SWLA, contacts with local government television channels and libraries for seminars as well as other community-based workshops/seminars were being considered. These efforts currently are "on hold."

2021-2022:

The department will continue its involvement in the Master Naturalist Program and other biology-associated community/outreach programs. Faculty will be encouraged to participate in community-based workshops /seminars now that pandemic restrictions are being lifted.

2022-2023:

The department will continue its involvement in the Master Naturalist Program and other biology-associated community/outreach programs. Faculty will be encouraged to participate in community-based workshops /seminar.

2023-2024:

The department will continue its involvement in the Master Naturalist Program and other biology-associated community/outreach programs. We will continue our departmental association with the parish public library system as well as K-12 schools in the five-parish area.

**Performance Objective 3 Graduates of the BS in Biological Sciences program will be successful in acceptance to graduate/professional school and/or gaining employment.**

**1 Assessment and Benchmark**

Benchmark: 80% acceptance rate for students who apply to graduate/professional school.

**1.1 Data**

Year	Students that applied to graduate or professional school	Students accepted into graduate or professional school		Students not accepted into graduate or professional school		Graduates with unknown status	
	#	#	%	#	%	#	%
2013	19	14	74.0%	4	21.0%	1	5.3%
2014	13	8	61.5%	4	30.8%	1	7.7%
2015	16	15	94.0%	0	0.0%	1	6.0%
2016	11	7	64.0%	—	—	3	27.0%
2017	28	19	68.0%	—	—	7	25.0%
2018	8	6	75.0%	1	12.5%	1	12.5%
2019	16	13	81.0%	2	12.5%	1	6.3%
2020	13	9	69.2%	0	0%	4	30.8%

Academic Year	Students that applied to graduate or professional school	Students accepted into graduate or professional school		Students not accepted into graduate or professional school		Graduates with unknown status	
	#	#	%	#	%	#	%
2021-2022	23	20	86.9%	1	4.3%	2	8.7%
2022-2023	20	17	85%	—	—	3	15%
2023-2024	22	16	73%	3	14%	3	14%

**1.1.1 Analysis of Data and Plan for Continuous Improvement**

2020:

The benchmark of 80% was not achieved. Career tips in biology continue to be incorporated in the capstone course as well as graduate program search methods for students interested in pursuing post-baccalaureate degrees in biology/biology-related fields. We will continue to use this benchmark. Communication was hampered by COVID-19 pandemic and hurricanes.

2021-2022:

The benchmark of 80% was achieved. The data show a 17.7% increase over the previous academic year. Career tips in biology continue to be incorporated in the capstone course as well as graduate program search methods for students interested in pursuing post-baccalaureate degrees in biology/biology-related fields. We will continue to use this benchmark.

2022-2023:

The benchmark of 80% was achieved. The data show a 4.5% decrease over last year, but there are a



greater number of students that we do not know their status. Career tips in biology continue to be incorporated in the capstone course as well as graduate program search methods for students interested in pursuing post-baccalaureate degrees in biology/biology-related fields. We will continue to use this benchmark.

2023-2024:

The benchmark of 80% was not achieved. There was a 12% decrease in acceptance rates as compared to last year. A significant amount of the students that were not accepted are reapplying for admission after strengthening their applications. Career tips in biology continue to be incorporated in the capstone course as well as graduate program search methods for students interested in pursuing post-baccalaureate degrees in biology/biology-related fields. We will continue to use this benchmark.

## 2 Assessment and Benchmark

Benchmark: 80% employment rate for students who seek employment upon graduation.

### 2.1 Data

Year	Students known to have sought employment after graduation	Students that achieved employment		Students with unknown status	
	#	#	%	#	%
2013	5	5	100.0%	0	0.0%
2014	13	8	62.0%	5	38.0%
2015	11	7	64.0%	4	36.0%
2016	9	8	89.0%	1	11.0%
2017	9	3	33.0%	6	67.0%
2018	20	13	65.0%	7	35.0%
2019	22	14	64.0%	8	36.0%
2020	14	8	57.1%	6	42.9%

Academic Year	Students known to have sought employment after graduation	Students that achieved employment		Students with unknown status	
	#	#	%	#	%
2021	25	10	40.0%	15	60.0%
2022	17	7	41%	10	59%
2023	24	16	67%	8	33%

#### 2.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

The benchmark of 80% was not achieved. We continue to incorporate career tips in biology in the capstone course as well as in other courses. During departmental meetings, faculty are continually informed to discuss biology career options with students. Most likely, employment opportunities were affected by COVID-19 shutdown and recent hurricanes.

2021-2022:

The benchmark of 80% was not achieved. The percentage is low in part due to an inability to contact students after graduation. Greater attempts will be made to stay in contact with students post-graduation to stay informed on their progress after leaving the university. We continue to incorporate career tips in biology in the capstone course as well as in other courses. During departmental meetings, faculty are

continually informed to discuss biology career options with students.

2022 calendar year:

The benchmark of 80% was not achieved. The percentage is low in part due to an inability to contact students after graduation. An email was sent out to all students that graduated in the 2022 calendar year, but the status of most students that replied were already known. Greater attempts will be made to stay in contact with students post-graduation to stay informed on their progress after leaving the University. We continue to incorporate career tips in biology in the capstone course as well as in other courses. During departmental meetings, faculty are continually informed to discuss biology career options with students.

2023 calendar year:

The benchmark was not achieved. We have increased the feedback from students by 26% over the previous calendar year but are still unable to receive feedback from all students. Students from the previous calendar year are emailed in May to find out what they are doing and if they need any assistance from the department. This year when graduating students filled out their exit surveys, I stressed the importance of giving their email address so they can be contacted in the future. They seemed rather receptive to the idea so hopefully we will have better responses in the future.

#### **Performance Objective 4 Demonstrate excellence in teaching in order to enhance student recruitment, retention, and graduation.**

##### **1 Assessment and Benchmark**

Benchmark: Student Evaluation of Instruction (SEI) scores will average at least 90%.

##### **1.1 Data**

Year	SEI Average
2013	90.89%
2014	93.03%
2015	93.80%
2016	93.00%
2017	92.88%
2018	94.07%
2019	92.16%
2020	90.5%

Academic Year	SEI Average
2020-2021	87.6%
2021-2022	90.0%
2022-2023	91.8%
2023-2024	91.2%

##### **1.1.1 Analysis of Data and Plan for Continuous Improvement**

2020:

Faculty members continue to earn high scores on student evaluations. There was again a slight decrease this year from previous years. The change from in-class to online evaluations as well as the hurricanes in Fall 2020 plus the current COVID-19 Pandemic in addition to the fact that scores were not reported for Fall 2020 all may affect SEI scores. Future consistent online SEIs are needed before trends can be evaluated.

2020-2021:

This benchmark was not met. Scores on student evaluations were lower than previous years. This may be due to the academic year being completely online. Based on this, it is difficult to make conclusions on these data. Since student evaluation scores have continued to decrease during the pandemic, it suggests that

students prefer face-to-face courses. Therefore, getting back into the classroom is a goal for the upcoming academic year.

2021-2022:

This benchmark was met. Faculty members continue to earn high scores on student evaluations. There was a slight increase this year from the previous year. This is probably due to more face-to-face courses being offered.

2022-2023:

This benchmark was met. Faculty members continue to earn high scores on student evaluations. There was a slight increase this year from the previous year.

2023-2024:

This benchmark was met. There was a 0.6% decrease in scores compared to the previous year. It was observed that some faculty that typically get high scores had much lower scores due to a low response rate. This may continue to be an issue in the future. Perhaps there should be time set aside in class for students to respond to the survey. This should not be an issue since the majority of students have cell phones.

## 2 Assessment and Benchmark

Benchmark: Graduating seniors will indicate they are at least 85% satisfied with their experience in the department.

### 2.1 Data

Year	Graduating seniors satisfied with their experience in the department	
	#	%
2013	—	88.7%
2014	—	89.9%
2015	—	95.4%
2016	—	90.0%
2017	—	90.72%
2018	—	91.65%
2019	38	93.15%
2020	30	90.23%

Academic Year	Graduating seniors satisfied with their experience in the department	
	#	%
2020-2021	43	90.3%
2021-2022	43	90.85%
2022-2023	30/35	85.7%
2023-2024	20/25	80%

#### 2.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

Based on the Department Exit Exam, graduating seniors on average were 90.23% satisfied with their experience in the department. This objective was met; however, this is a small decrease from the previous year. The experience noted also may have been due to the COVID-19 Pandemic online course transitions and recent hurricanes that devastated SWLA.

2020-2021:

Based on the Department Exit Exam, graduating seniors on average were 90.3% satisfied with their experience in the department. Eight of 43 (18.6%) graduating seniors provided satisfaction scores that were below the benchmark. This percentage is similar to that seen in the last calendar year when courses were online due to the pandemic.

#### 2021-2022:

Based on the Department Exit Exam, graduating seniors on average were 90.85% satisfied with their experience in the department. This benchmark was met and is a small increase (0.55%) over last year. Five out of 48 (10.4%) graduating seniors provided satisfaction scores that were below the benchmark. Student satisfaction with the department seems to remain fairly stable over time.

#### 2022-2023:

Based on the Department Exit Exam, 30/35 graduating seniors provided a satisfaction score of 85% or higher. Therefore, 85.7% were satisfied with their experience in the department. This benchmark was met. The overall average of satisfaction scores was 88.8%. This is a decrease over last year. Fall 2022 graduating students were mailed their exit survey, but not all returned the document so data for this semester is incomplete. Spring 2023 students were required to come to the office and fill out their survey so all students complied. We will go back to requiring students to come to the office to fill out the exit survey in order to receive information from all students.

#### 2023-2024:

Based on the Department Exit Exam, 20/25 graduating seniors provided a satisfaction score of 85% or higher. Therefore, 80% were satisfied with their experience in the department. This benchmark was not met. The overall average of satisfaction scores was 91.7%. This is an increase over last year even though the benchmark was not met. All students were required to come to the office to fill out the exit survey in order to receive information from all students.

### 3 Assessment and Benchmark

Benchmark: All faculty will attend seminars, workshops, or short courses on topics relevant to teaching or advising.

Prior to 2016-2017, the benchmark was >50% of the faculty will attend seminars, workshops, or short courses on topics relevant to teaching or advising.

#### 3.1 Data

Academic Year	Faculty that attended seminars, workshops, or short courses pertaining to teaching/advising	
	#	%
2013	—	100%*
2014	—	89%
2015	—	58%
2016	—	100%
2017	—	100%
2018	13/13	100%
2019	13/13	100%
2020	14/14	100%

\*This percentage excludes two faculty members (who were in their terminal year after being denied tenure) who did not submit their APR.

Academic Year	Faculty that attended seminars, workshops, or short courses pertaining to teaching/advising	
	#	%
2020-2021	8/14	57%

2021-2022	6/12	50%
2022-2023	12/12	100%
2023-2024	11/12	92%

### 3.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

A Departmental Review Session on Advising was incorporated in the fall department faculty meeting and an advising orientation session was provided to the two new faculty members. All faculty members attended this meeting. Seminars, workshops, and short courses on topics relevant to teaching or advising were limited due to COVID-19 Pandemic. This objective was met.

2020-2021:

Only 57% of faculty attended seminars, workshops, or short courses on topics relevant to teaching or advising. The objective was not met. Due to the pandemic and hurricanes, there were not sufficient opportunities for in person sessions. Faculty will be reminded to participate in these types of opportunities during the Fall departmental faculty meeting.

2021-2022:

Only 50% of faculty attended seminars, workshops, or short courses on topics relevant to teaching or advising. The objective was not met. There were not as many in-person sessions offered in this academic year. Faculty will be reminded to participate in these types of opportunities during the Fall departmental faculty meeting.

2022-2023:

All faculty members attended seminars, workshops, or short courses on topics relevant to teaching or advising. This objective was met. The requirement that faculty must have 150 or 300 minutes of continued education on teaching has made this benchmark mandatory.

2023-2024: This benchmark was not met. Eleven (92%) faculty attended seminars, workshops, and short courses on topics relevant to teaching or advising. One faculty member did not attend any in this academic year. This was due to the faculty member receiving all 300 required minutes in the previous academic year. All faculty are presently compliant with the required number of continuing education minutes.

## Performance Objective 5 Demonstrate commitment to research and creative and scholarly activity.

### 1 Assessment and Benchmark

Benchmark: 50% of the tenured and tenure-track faculty who hold doctorate degrees will publish a refereed journal article, book chapter, or a book, and will serve as peer reviewers of manuscripts for journals or grant agencies.

Prior to 2016 the benchmark for this assessment was set at 20%.

#### 1.1 Data

Year	Published a refereed journal article, book chapter, or a book		Served as peer reviewers of manuscript for journals or grant agencies	
	#	%	#	%
2013	—	63.0%	—	75.0%
2014	—	33.0%	—	44.0%
2015	—	44.0%	—	56.0%
2016	—	55.6%	7	77.8%
2017	—	55.6%	5	55.6%
2018	5/9	55.6%	3/9	33.3%
2019	4/9	44.4%	3/9	33.3%
2020	5/10	50.0%	3/10	30.0%

Academic Year	Published a refereed journal article, book chapter, or a book		Served as peer reviewers of manuscript for journals or grant agencies	
	#	%	#	%
2020-2021	5/10	50.0%	3/10	30.0%
2021-2022	3/8	37.5%	3/12	25%
2022-2023	4/8	50.0%	4/8	50.0%
2023-2024	6/9	66.7%	5/9	55.6%

### 1.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

Faculty continued to conduct research until COVID-19 pandemic and the disastrous hurricanes hit SWLA in Spring and Fall, respectively. These events greatly affected overall scientific productivity. Research activities were just beginning with the opening and subsequent reparations in Frasci Annex. Despite these issues, faculty have been creative in their research and many with other colleagues to continue to be active in their fields. With the increased need for more classes, faculty have taken on more teaching overloads limiting research activity. The untimely departure of a key tenure-track professor compounded with COVID-19 pandemic and the hurricanes also affected the research activity of other faculty members who had to gear up to cover classes. Five (50.0%) tenured/tenure-track faculty holding doctorates published in peer reviewed journals. This objective was met.

Three (30.0%) tenured/tenure-track faculty holding doctorates served as peer reviewers for professional manuscripts. This number is slightly less than the previous year due to the increase in tenure-track faculty members. This objective was not met; however, three faculty members serve as editors for professional organizations/journals which can affect individual manuscript review. The importance of manuscript review will be addressed with the understanding that manuscript review requests vary and depend on the need for review.

2020-2021:

For the entire 2020-2021 academic year, the department was mainly online due to the Covid-19 pandemic. Research laboratories within the department were being repaired due to damage sustained from the two hurricanes. Furthermore, equipment necessary for research projects was replaced due to damage from the hurricane. These issues affected faculty that perform research in a laboratory setting, but not faculty that perform field research. Five (50.0%) tenured/tenure-track faculty holding doctorates published in peer-reviewed journals. This benchmark met. Since courses will be face-to-face in the Fall, faculty will be able to begin conducting laboratory research once again. In addition, collaborations amongst faculty will be encouraged in order to move projects along at a more rapid rate.

Three (30.0%) tenured/tenure-track faculty holding doctorates served as peer reviewers for professional journals. This number is the same as the previous year. This objective was not met. Two faculty are members of editorial review boards, which can affect manuscript review. Faculty will be encouraged to volunteer their services as peer reviewers at journals in which they publish.

2021-2022:

Three (37.5%) faculty published journal articles. Eleven articles were published in peer-reviewed journals and six articles were published in non-peer-reviewed journals. We did not meet the benchmark. All articles were published by faculty that perform field based research. Faculty that perform lab based research will take longer to get data due to restarting their labs after the hurricanes/pandemic.

Three (37.5%) faculty served as reviewers for manuscripts. This benchmark was not met. Two faculty are members of editorial review boards, which can affect manuscript review. Faculty will be encouraged to volunteer their services as peer reviewers at journals in which they publish.

2022-2023:

Four (50.0%) faculty published journal articles. Four articles were published in peer-reviewed journals and three articles were published in non-peer-reviewed journals. We met the benchmark. Faculty will be encouraged to continue with their on-going research projects.

Four (50.0%) faculty served as reviewers for manuscripts. Twenty-one journal articles were reviewed by faculty. This benchmark was met. Two faculty are members of editorial review boards, which can affect manuscript review. Faculty will be encouraged to volunteer their services as peer reviewers at journals in which they publish.

2023-2024:

Six (66.7%) faculty published journal articles. One article was published in peer-reviewed journals and 12 articles were published in non-peer-reviewed journals. We met the benchmark. Faculty will be encouraged to continue with their on-going research projects.

Five (55.6%) faculty served as reviewers for manuscripts. Twenty journal articles were reviewed by faculty. This benchmark was met. Two faculty are members of editorial review boards, which can affect manuscript review. Faculty will be encouraged to volunteer their services as peer reviewers at journals in which they publish.

## 2 Assessment and Benchmark

Benchmark: 50% of all faculty will give a professional meeting presentation, and 75% of all faculty will attend at least one professional meeting.

### 2.1 Data

Academic Year	Faculty that gave a professional meeting presentation		Faculty that attend at least one professional meeting	
	#	%	#	%
2013	—	53.0%	—	88.0%
2014	—	26.0%	—	58.0%
2015	—	42.0%	—	58.0%
2016	7/13	53.8%	8/13	61.5%
2017	9/13	61.5%	11/13	84.6%
2018	9/13	61.5%	13/13	100.0%
2019	7/13	53.8%	9/13	69.2%
2020	1/14	7.1%	5/14	35.7%

Academic Year	Faculty that gave a professional meeting presentation		Faculty that attend at least one professional meeting	
	#	%	#	%
2020-2021	1/14	7.1%	5/14	35.7%
2021-2022	3/12	25%	8/12	67%
2022-2023	7/12	58.3%	10/12	83.3%
2023-2024	9/13	69.2%	10/13	76.9%

#### 2.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

COVID-19 Pandemic and the fall 2020 hurricanes significantly affected professional engagement.

One out of 14 (7.1%) faculty in the department gave a total of two (2) professional meeting presentations. This objective was not met.

Five out of 14 (35.7%) faculty in the department attended a total of five professional society meetings. This objective was not met. Professional engagement continues to be a topic of conversation during faculty meetings. However, professional engagement has been limited due to teaching overloads, the untimely departure of a key faculty member, and COVID-19 restrictions.

2020-2021:

COVID-19 Pandemic and the fall 2020 hurricanes significantly affected professional engagement.

One out of 14 (7.1%) faculty in the department gave a total of two (2) professional meeting presentations. This objective was not met.

Five out of 14 (35.7%) faculty in the department attended a total of eight professional society meetings. This objective was not met. Professional engagement continues to be a topic of conversation during faculty meetings. However, professional engagement has been limited due to teaching overloads, the untimely departure of a key faculty member, and COVID-19 restrictions.

2021-2022:

Three faculty (25%) gave a total of 4 professional meeting presentations. This benchmark was not met.

Eight faculty (67%) attended a total of 18 professional meetings. This objective was not met. Professional engagement will be discussed at the fall departmental meeting. The department will begin a monthly journal club/research based meeting to encourage faculty to form more collaborations within the department and spark a renewed interest in scientific discovery amongst faculty.

2022-2023:

Seven faculty (58.3%) gave a total of 18 professional meeting presentations. This benchmark was met. There was an 33.3% increase in faculty presentations over last year.

Ten faculty (83.3%) attended a total of 20 professional meetings. This objective was met. There was an 16.3% increase in faculty attendance at professional meetings over last year.

2023-2024:

Nine faculty (69.2%) gave a total of 24 professional meeting presentations. This benchmark was met. There was an 10.9% increase in the number of faculty presenting and an 17% increase in the number of presentations given over last year.

Ten faculty (76.9%) attended a total of 18 professional meetings. This objective was met. There was a 6.4% decrease in faculty attendance at professional meetings over last year. This will be discussed with faculty at the Fall departmental meeting.

### 3 Assessment and Benchmark

Benchmark: All faculty will hold membership in at least one professional society, and 50% of all faculty will participate in the activities of professional societies.

#### 3.1 Data

Year	Faculty that held membership in at least one professional society		Faculty that participated in activities of professional societies	
	#	%	#	%
2013	—	94.0%	—	71.0%
2014	—	68.0%	—	47.0%
2015	—	95.0%	—	63.0%
2016	12/13	92.3%	8/13	61.5%
2017	12/13	92.3%	7/13	53.8%
2018	13/13	100.0%	10/13	76.9%



2019	11/13	84.6%	8/13	61.5%
2020	13/14	92.6%	4/14	28.6%

Academic Year	Faculty that held membership in at least one professional society		Faculty that participated in activities of professional societies	
	#	%	#	%
2020-2021	13/14	92.6%	3/14	21.4%
2021-2022	10/12	83%	4/12	33%
2022-2023	12/12	100%	10/12	83.3%
2023-2024	12/13	92.3%	12/13	92.3%

### 3.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

Thirteen out of 14 (92.6%) faculty in the department held membership in 37 professional societies. This objective was not met; however, this is an 8% increase from the previous year. Professional society memberships also are becoming more expensive and a reflection of membership value is occurring with the current times. Again, COVID-19 pandemic and recent hurricanes have affected professional engagement.

Four out of 14 (28.6%) faculty in the department participated in activities of professional societies. This objective was not met. Note: COVID-19 restrictions and recent hurricanes have impacted professional engagement.

2020-2021:

Thirteen out of 14 (92.6%) faculty in the department held membership in 31 professional societies. This objective was not met. Professional society memberships also are becoming more expensive and a reflection of membership value is occurring with the current times. Again, COVID-19 pandemic and recent hurricanes have affected professional engagement.

Three out of 14 (21.4%) faculty in the department participated in activities of professional societies. This objective was not met. Note: COVID-19 restrictions and recent hurricanes have impacted professional engagement.

2021-2022:

Ten out of 12 (83%) faculty held membership in 36 professional organizations. The benchmark was not met.

Four out of 12 (33%) faculty participated in societies. The benchmark was not met. This will be discussed with faculty at the fall departmental meeting.

2022-2023:

All faculty held membership in a total of 38 professional organizations. The benchmark was met.

Ten out of 12 (83.3%) faculty participated in societies. The benchmark was met. This was an 50.3% increase over last year.

2023-2024:

Twelve (92.3%) faculty held membership in a total of 35 professional organizations. The benchmark was not met. This will be discussed with faculty at the annual department meeting in the Fall.

Twelve out of 13 (92.3%) faculty participated in societies. The benchmark was met. This was an 9% increase over last year.

**mission.****1 Assessment and Benchmark**

Benchmark: 50% of faculty will write teaching-related grant proposals, and 50% of the teaching-related proposals which are submitted will receive funding.

**1.1 Data**

Year	Faculty that wrote teaching-related grant proposals		Submitted teaching-related proposals that received funding	
	#	%	#	%
2013	—	59.0%	—	92.0%
2014	—	47.0%	—	100%
2015	—	68.0%	—	95.0%
2016	8/13	62.0%	12/12	100%
2017	8/13	61.5%	10/10	100%
2018	7/13	53.8%	6/8	75%
2019	9/13	69.2%	7/9	77%
2020	5/14	35.7%	5/6	83.3%

Academic Year	Faculty that wrote teaching-related grant proposals		Submitted teaching-related proposals that received funding	
	#	%	#	%
2020-2021	7/14	50.0%	6/8	75.0%
2021-2022	4/12	33%	4/4	100%
2022-2023	6/12	50.0%	7/8	87.5%
2023-2024	9/13	69%	9/9	100%

**1.1.1 Analysis of Data and Plan for Continuous Improvement**

2020:

Four out of 14 (35.7%) faculty members submitted teaching-related grant proposals. This objective was not met. Faculty submission of teaching-related and research-related grant and contract proposals will be discussed during faculty meetings.

Analysis from data concludes the objective was met. Five out of 6 (83.3%) of the submitted teaching-related proposals were funded. The total amount of funds received from these proposals was over \$150K. Faculty submission of teaching-related grant proposals will be encouraged. Proposals included: teaching equipment upgrades, STEM educational training.

2020-2021:

Half of the faculty wrote 8 teaching related grants. We met this benchmark. Six of the 8 (75.0%) grants were funded. Proposals were focused on equipment upgrades for laboratories. We will continue to encourage faculty submission of teaching grants.

2021-2022:

Four out of 12 (33%) of faculty wrote teaching related proposals in the form of endowed professorships. This benchmark was not met. TASC grants this year were focused on repairing damaged equipment. Our department was not in need of repair so faculty did not submit TASC grants so the monies could go to other departments that suffered more damage.

All teaching grants were funded. This benchmark was met.

2022-2023:

Six out of 12 (50%) faculty wrote teaching related proposals, and two other faculty were junior authors on proposals making 66.7% of faculty involved with a proposal that was submitted. There were a total of 8 teaching grants submitted. This benchmark was met.

Seven out of eight (87.5%) proposals were funded. This benchmark was met.

2023-2024:

Nine out of 13 (69%) faculty wrote teaching related proposals in the form of endowed professorships and TASC proposals for a total of 14 grants submitted. This was a 19% increase over last year. This benchmark was met.

All teaching grants were funded. This benchmark was met.

## 2 Assessment and Benchmark

Benchmark: 50% of the tenured and tenure-track faculty who hold doctorate degrees will submit research-oriented grant or contract proposals, and 50% of the submitted research-oriented grant or contract proposals will receive funding.

### 2.1 Data

Academic Year	Faculty that submitted research-oriented grant or contract proposals		Submitted research-oriented grant or contract proposals that received funding	
	#	%	#	%
2013	—	75.0%	—	100%
2014	—	89.0%	—	75.0%
2015	—	67.0%	—	83.0%
2016	8/9	89.0%	11/12	92.0%
2017	7/9	77.8%	8/9	88.9%
2018	7/9	77.8%	8/9	88.9%
2019	6/9	66.7%	7/8	87.5%
2020	6/10	60%	7/8	87.5%

Academic Year	Faculty that submitted research-oriented grant or contract proposals		Submitted research-oriented grant or contract proposals that received funding	
	#	%	#	%
2020-2021	5/10	50.0%	6/6	100%
2021-2022	7/8	87.5%	8/11	73%
2022-2023	5/7	71%	6/8	75%
2023-2024	5/9	56%	5/5	100%

#### 2.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

Six out of 10 (60%) tenured and tenure-track faculty holding doctorates submitted a total of eight research-oriented grant or contract proposals. This objective was met. Faculty submission of research-related grant and contract proposals will be discussed at faculty meetings.

Seven out of 8 (87.5%) of the submitted research-oriented grant or contract proposals received funding. The total amount of funds received was nearly \$40K. This objective was met. Faculty submission of research-related grant and contract proposals will be discussed at faculty meetings. The current COVID-19 Pandemic and devastating hurricanes causing temporary facility shutdown may have affected submission opportunities.

2020-2021:

Five out of 10 (50%) of faculty submitted research grants. All of the submitted grants were funded (100%). These benchmarks have been met. After a year without being at the University for in-person classes, some professors did not submit grants for the upcoming year. Now that classes will be back in person, faculty will be encouraged to engage in research and submit grants.

2021-2022:

Seven out of 8 (87.5%) faculty submitted a total of 11 research grants. Eight (73%) of these grants were funded. These benchmarks have been met. Faculty will continue to be encouraged to submit research grants to fund their scholarly activities.

2022-2023:

Five out of seven (71%) tenured or tenure-track faculty submitted a total of eight research grants. Six (75%) of these grants were funded. These benchmarks have been met. Faculty will continue to be encouraged to submit research grants to fund their scholarly activities.

2023-2024:

Five out of nine (56%) tenured or tenure-track faculty submitted a total of five research grants. All (100%) of these grants were funded. These benchmarks have been met. Some faculty did not submit research grants this year due to build up of funds in their accounts. This allowed other faculty to apply for EPs. Faculty will continue to be encouraged to submit research grants to fund their scholarly activities.

### 3 Assessment and Benchmark

Benchmark: Sufficient research space will be available for faculty who conduct research.

#### 3.1 Data

2019:

Several faculty have moved into the renovated Frasch Annex for research purposes. Research space for graduate students/research faculty was added when non-Biology Dept./temporary personnel left. Contractual work ended; however, issues with the Annex facility remained a concern (e.g., electrical outlets needed repair, gas leaks needed fixing, hoods needed repair), and some are still being addressed.

2020:

Several faculty moved into the renovated Frasch Annex for research purposes. COVID-19 Pandemic severely affected interactive hands-on research inherent in scientific studies. The devastating hurricanes also had an impact on research space usage. As mentioned previously, contractual work ended; however, a few issues with the renovated Annex facility are still being addressed.

2020-2021:

Hurricane damage occurring in Fall 2020 prevented faculty from accessing research labs for most of the semester. The building reopened for Spring 2021 allowing faculty access to their research labs. Tenure-track and tenured faculty all have laboratory research available to them.

2021-2022:

All tenure-track/tenured faculty have dedicated research space in either Frasch or Frasch Annex.

2022-2023:

All tenure-track/tenured faculty have dedicated research space in either Frasch or Frasch Annex.

2023-2024:

All tenure-track/tenured faculty have dedicated research space in either Frasch or Frasch Annex.

##### 3.1.1 Analysis of Data and Plan for Continuous Improvement

2020:

Some research faculty have moved into Frasch Annex. Contractual work has ended; however, the Annex facility still has issues that need addressing. Since mechanical/physical performance of space was not completely acceptable, and it's repair was hampered by the COVID-19 Pandemic and devastating

hurricanes, the objective was not met. Currently, the Biology Dept. is working with Facilities to address these matters.

2020-2021:

Faculty laboratory space is available starting in Spring 2021. Due to courses being mostly online for the semester, many faculty worked from home. Faculty will be encouraged to continue research at the yearly faculty meeting.

2021-2022:

Faculty laboratory space is fully available. There are no issues at present.

2022-2023:

Faculty laboratory space is fully available. There are no issues at present.

2023-2024:

Faculty laboratory space is fully available. There are no issues at present.