

# Biology

#7 Plan cycle - 7 Plan cycle 2021/2022 7/1/21 - 6/30/22

# 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.

# Performance Objective 1 Increase enrollment, persistence, retention, and graduation rates for each program offered by the department.

# 1 Assessment and Benchmark

Benchmark: Increase enrollment by 5% each year, overall and in each program offered by the department.

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
  - <sup>o</sup> MOBI Molecular Biology
  - PPHA Pre-Pharmacy
  - PRDN Pre-Dentistry
  - ° PRMD Pre-Medicine

# 1.1 Data

# 2017-2018:

Major	Conc			F	all			Spring					
Major	Conc.	F	S	J	Sr	Т	CMP	F	S	J	Sr	Т	CMP
	BIED	1	1	6	1	9	0	2	0	2	4	8	0
	MOBI	5	3	2	9	19	1	3	6	5	6	20	4
BIOS	PRDN	25	1	3	3	32	1	12	6	2	3	23	0
	PRMD	81	37	26	17	161	1	48	56	17	27	148	7
	(blank)	31	21	21	33	106	7	25	13	22	34	94	12
Grand	Grand Total 143			58	63	327	10	90	81	48	74	293	23

2018-2019:

Major	Conc			F	all			Spring					
Iviajoi	Conc.	F	S	J	Sr	Т	CMP	F	S	J	Sr	Т	CMP
	BIED	4	1	0	2	7	0	3	2	0	2	7	0
	MOBI	4	5	3	9	21	0	4	3	5	8	20	3
PIOS	PPHA	5	2	2	0	9	0	7	1	2	1	11	0
ыса	PRDN	14	11	1	3	29	1	8	10	3	2	23	1
	PRMD	80	49	29	28	186	3	45	42	40	26	153	9
	(blank)	23	11	7	33	74	5	11	17	10	33	71	14
Grand	I Total	130	79	42	75	326	9	78	75	60	72	285	27

#### 2019-2020:

Major	Cono			F	Fall			Spring					
Major	Conc.	F	S	J	Sr	Т	CMP	F	S	J	Sr	Т	CMP
	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
BIOS	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	l Total	129	90	60	75	354	11	78	82	69	79	308	21

2020-2021:

Major	Conc			F	all			Spring						
Majoi	Conc.	F	S	J	Sr	Т	CMP	F	S	J	Sr	Т	CMP	
	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	
DIOS	PPHA	13	7	2	3	25	0	5	7	4	4	20	0	
ыоз	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	
Grand	I Total	113 87 77 89 366 12 65 70 63 1						100	298	30				

2021-2022:

Major	Cono			F	all			Spring						
Major	Conc.	F	S	J	Sr	Т	CMP	F	S	J	Sr	Т	CMP	
	BIED	1	1	3	0	5	0	0	2	2	1	5	0	
	MOBI	2	1	3	4	10	2	1	1	2	4	8	1	
BIOS	PPHA	9	4	6	3	22	0	1	6	4	7	18	2	
ысз	PRDN	12	4	6	4	26	0	11	1	0	7	19	2	
	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	
Grand	I Total	97	53	75	88	313	50	53	59	92	254	34		

Percentage Change between 2017-2018:

Major	Fall	Total	% Change
BIOS	2017	327	0 205%
ысз	2018	326	-0.305%
Total	2017	327	0.205%
Total	2018	326	-0.305%

Percentage Change between 2018-2019:

Major	Fall	Total	% Change
BIOS	2018	326	9 590%
ысэ	2019	354	0.009%
Total	2018	326	9 5909/
Totai	2019	354	0.009%

Percentage Change between 2019-2020:

Major	Fall	Total	% Change
1			

BIOS	2019	354	3 380%
ысз	2020	366	3.30970
Total	2019	354	2 2900/
Total	2020	366	3.369%

Percentage Change between 2020-2021:

Major	Fall	Total	% Change
PIOS	2020	366	14 4909/
ыоз	2021	313	-14.400%
Tetal	2020	366	4.4.4909/
Totai	2021	313	-14.460%

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

# 2017-2018:

Fall 2017 had the highest enrollment total since fall 2013. Spring 2018 was the fourth highest enrollment total since fall 2013 and the highest enrollment total of any spring semester since 2014. PRMD continues to have the highest number of students followed by PRDN and MOBI, which tripled in number this reporting period. 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, and 2017-2018. Plans are in progress for student recruitment in the pre-health professions and the department has a Retention/Recruitment Committee.

# 2018-2019:

Enrollment in Fall 2018 was one student less than Fall 2017 (the highest enrollment total since Fall 2013); Spring 2019 was eight students less than Spring 2018 (the highest enrollment total since Spring 2014). PRMD continues to have the highest number of students followed by PRDN and MOBI. 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, and again this year (2018-2019). The department began recruitment in the pre-health professions with the start of a seminar series for area high school students and the department has a Retention/Recruitment Committee and a Public Relations Committee for disseminating department information.

# 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 prehealth 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.

# 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:

Maior Cou	Cono	2018-2019		2019-2020		2020-2021			2021-2022			2022-2023				
Major	Conc.	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			

Graduate Completers:

Major Co	Cono	20	18-20	19	20	19-20	20	20	20-20	21	20	21-20	22	20	22-20	23
	Conc.	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			

# 2.1.1 Analysis of Data and Plan for Continuous Improvement

2018-2019:

INBI concentration began in Fall 2018. Analysis of data is premature at this time.

# 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 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.

# 3 Assessment and Benchmark

Benchmarks:

• A persistence rate (retained students 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

2012:

			Persi	stence		R	etent	ion Ra	te			Gr	adua	tion Ra	ate	
Major	Cohort Size	Same Maior?	R	ate	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-`	Year
	0120	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	53	59.6	29	32.6	17	19.1	14	15.7	13	14.6	13	14.6	13	14.6
BIOS	89*	Changed	28	31.5	37	41.6	42	47.2	35	39.3	17	19.1	26	29.2	31	34.8
		Total	81	91.0	66	74.2	59	66.3	49	55.1	30	33.7	39	43.8	44	49.4

\*3 students were previously undeclared before declaring BIOS.

2013:

			Persi	stence		R	etent	ion Ra	te			Gra	aduat	tion Ra	te	
Major	Cohort Size	Same Maior?	R	ate	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-`	Year
	0120	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	65	70.7	43	46.7	31	33.7	24	26.1	18	19.6	2	2.2	0	0.0
BIOS 92	92*	Changed	23	25.0	34	37.0	29	31.5	31	33.7	11	12.0	10	10.8	5	5.4
		Total	88	95.7	77	83.7	60	65.2	55	59.8	29	31.5	12	13.0	5	5.4

\*2 students were previously undeclared before declaring BIOS.

2014:

			Persi	stence		R	etent	tion Ra	te			Gr	adua	ation Ra	ate	
Major Size	Same Maior?	R	ate	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-`	Year	
	0120	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	53	59.6	38	42.7	21	23.6	18	20.2	9	10.1	15	16.8	16	17.9
BIOS	89	Changed	30	33.7	30	33.7	31	34.8	28	31.5	12	13.4	21	23.5	27	30.3
		Total	83	93.3	68	76.4	52	58.4	46	51.7	21	23.5	36	40.4	43	48.3

2015:

			Persi	stence		R	etent	ion Ra	te			Gr	adua	ation Ra	ate	
Major	Cohort Size	Same Maior?	R	ate	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-	Year
	0.20	major	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	87	69.4	58	46.8	35	28.2	25	20.2	17	13.7	21	16.9	21	16.9
BIOS	124	Changed	30	24.2	39	31.5	43	34.7	39	31.5	13	10.5	28	22.6	31	25.0
		Total	116	93.5	97	78.2	78	62.9	64	51.6	30	24.2	49	39.5	52	41.9

Page 8 of 27

2016:

			Persi	stence		R	etent	ion Ra	te		9 	Gra	adua	tion R	ate	
Major Size	Same Maior?	R	ate	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-\	Year	
	0120	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	60	61.2	37	37.8	21	21.4	17	17.3						
BIOS	98	Changed	28	28.6	37	37.8	36	36.7	31	31.6						
		Total	88	89.8	74	75.5	57	58.2	48	48.9						

2017:

-											_					
			Persi	stence		R	etent	ion Ra	te			Gra	adua	tion R	ate	
Major Size	Same Maior?	R	ate	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	<i>r</i> ear	6-`	Year	
	0120	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	96	73.8	63	48.5	45	34.6	34	26.2						
BIOS	130	Changed	26	20.0	36	27.7	45	34.6	55	42.3						
		Total	122	93.8	99	76.2	90	69.2	89	68.5						

2018:

			Persi	stence		R	etent	ion Ra	te			Gra	adua	tion R	ate	
Major Size	Same Maior?	R	ate	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-`	r∕ear	
	0120	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	79	68.7	58	50.4	39	33.9	31	27.0						
BIOS	115	Changed	20	17.4	23	0.2	36	31.3	30	26.1						
		Total	99	86.1	81	70.4	75	65.2	61	53.1						

2019:

			Persi	stence		Re	etenti	on Rate	Э			Gra	adua	tion R	ate	
Major Cohort Size	Same Maior?	R	ate	Y1 -	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	rear	6-`	r∕ear	
	0.20	majori	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	87	74.4	66	56.4	47	40.2								
BIOS	117	Changed	23	19.7	35	29.9	37	31.6								
		Total	110	94.0	101	86.3	84	71.8								

2020:

			Persi	stence		Re	tenti	on Ra	te			Gr	adua	tion R	ate	
Major Cohort Size	Same Maior?	R	late	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-`	Year	
	0.20	majori	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	84	76.3	48	43.6										
BIOS	110	Changed	15	13.6	37	33.6										
		Total	99	90.0	85	77.2										

2021:

			Persi	stence		R	etent	ion Ra	te			Gr	adua	tion Ra	ate	
Major Size	Same Maior?	R	ate	Y1 <sup>-</sup>	to Y2	Y1	to Y3	Y1 1	to Y4	4-۱	/ear	5-`	∕ear	6-\	⁄ear	
	0.20	major .	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	51	60.7												
BIOS	84	Changed	24	28.6												
		Total	75	89.3												

# 3.1.1 Analysis of Data and Plan for Continuous Improvement

#### 2018-2019:

The persistence rate benchmark was met. Although the 7-year average is over 90%, early intervention procedures in introductory courses will be reviewed since 2018 showed the lowest persistence rate.

The retention rate benchmark for Y1 to Y2 was met. The percentage rate increased in 2017 from the previous year and is also higher than the 2012 rate. Fluctuations will be monitored to discern data trends. Since before and including 2017, the average rate for the previous 6 years was 77.4%.

The retention rate benchmark for Y1 to Y3 was met. Since before and including 2016, the average rate for the previous 5 years was 62.2%.

The retention rate benchmark for Y1 to Y4 was met. Since before and including 2015, the average rate for the previous 4 years was 54.6%.

For the cohort starting in 2012, the 5- and 6-year graduation benchmarks were met. The 4-year graduation rate was not met. Outreach and engagement efforts are under review to address this situation.

# 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.

# 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 comm	d on departmental hittees	Faculty that served o	on college/university hittees
	#	%	#	%
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/uni committees	
	#	%	#	%
2020-2021	14/14	100%	10/14	71%
2021-2022	14/14	100%	10/14	71%

2017 Committee Assignments [DOCX 15 KB 2/20/20]

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

2018:

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.

#### 2019:

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 to the department and changes may occur.

#### 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.

# 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

2018:

Three (23.1%) of the faculty declared serving as resource persons for the community (e.g., plant and animal identification, science fair judging, and biological consultation). Ten (76.9%) typically have served as a community resource. This objective was not met.

# 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.

# 2.1.1 Analysis of Data and Plan for Continuous Improvement

# 2018:

The benchmark will remain. Community requests for professional expertise (e.g., consultation, etc.) fluctuate. Local citizens bring plants/animals or bring/send pictures of such to the department. Faculty who typically are asked for community service/support/consultation will be reminded to document their service.

# 2019:

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. 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 limits any personal interaction.

# 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.

# 3 Assessment and Benchmark

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

# 3.1 Data

# 2018:

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. The department also is involved with the Master Naturalist Program coordinated with Calcasieu Parish Parks and LA Wildlife and Fisheries. In addition, Dr. Amber Hale has conducted science workshops for local elementary schools. Outreach participation has produced news clips on KPLC-TV and news articles in the local press.

### 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.

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

#### 2018:

The department will continue its involvement with Tuten Park and the Master Naturalist Program and pursue other biology-associated community/outreach programs.

# 2019:

The department will continue its involvement with Tuten Park, the Master Naturalist Program, and other biology-associated community/outreach programs. Community-based workshops/seminars are currently in the planning stage.

#### 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.

# 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 into grac professio	accepted duate or nal school	Studer accept gradu profession	nts not ed into ate or nal school	Gradua unknow	tes with n 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 into grac professio	accepted duate or nal school	Studer accept gradu profession	nts not ed into ate or nal school	Gradua unknow	tes with n status
	#	#	%	#	%	#	%
2021-2022	23	20	86.9%	1	4.3%	2	8.7%

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

# 2018:

The benchmark of 80% was not achieved. However, since we have incorporated career tips in biology in the capstone course as well as graduate program search methods for students interested in pursuing postbaccalaureate degrees in biology/biology-related fields in the capstone course, data show an increase of acceptance (75% compared to previous two years). During faculty meetings and at other venues, faculty will be informed to discuss biology graduate/professional school options with students.

# 2019:

The benchmark of 80% was achieved. The data show an increase, though slight (81%), from the previous unmet benchmark. 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 since the percentage was low.

# 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.

# 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	
	#	#	%	#	%
2021-2022	25	10	40.0%	15	60.0%

# 2.1.1 Analysis of Data and Plan for Continuous Improvement

2018:

The benchmark of 80% was not achieved. However, since we have incorporated career tips in biology in the capstone course, data show an increase of acceptance (65% compared to the previous year). During faculty meetings and at other venues, faculty will be informed to discuss biology career options with students.

# 2019:

The benchmark of 80% was not achieved. However, since we have incorporated career tips in biology in the capstone course, data show a consistent acceptance (64% compared to the previous year which was 65%). During departmental meetings, faculty are continually informed to discuss biology career options with students.

# 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.

# 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%

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

# 2018:

Faculty members continue to earn high scores on student evaluations. There was a slight increase this year from previous years. This year included a change from in-class to online evaluations. This transition possibly affected scores. Future SEIs are needed before trends can be evaluated.

# 2019:

Faculty members continue to earn high scores on student evaluations. There was a slight decrease this year from previous years. The change from in-class to online evaluations may affect scores. Future consistent online SEIs are needed before trends can be evaluated.

# 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.

# 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%	

# 2.1.1 Analysis of Data and Plan for Continuous Improvement

# 2018:

Based on the Department Exit Exam, graduating seniors on average were 91.65% satisfied with their experience in the department. This level of satisfaction is 0.93% higher than last year's average satisfaction level. This objective was met. Student satisfaction will be tracked to see if this is an increasing trend or fluctuation, especially when reviewing the increase/decrease in 2014, 2015, and 2016.

# 2019:

Based on the Department Exit Exam, graduating seniors on average were 93.15% satisfied with their experience in the department. This level of satisfaction is 1.5% higher than last year's average satisfaction level. This objective was met. Student satisfaction will be tracked to see if this is an increasing trend or fluctuation.

# 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 be 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.

# 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%	

# 3.1.1 Analysis of Data and Plan for Continuous Improvement

2018:

All faculty members attended seminars, workshops, or short courses on topics relevant to teaching or advising. This objective was met. Specific departmental advising training for faculty members advising students in different concentrations was implemented.

2019:

All faculty members attended seminars, workshops, or short courses on topics relevant to teaching or advising. This objective was met. Departmental advising training/discussions with faculty members have been incorporated into faculty meetings at the beginning of each semester.

# 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.

# 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%

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

#### 2018:

Faculty will continue to conduct research. They will be asked to join appropriate professional societies, to present their findings at professional meetings, and to submit manuscripts to refereed journals. However, research activities have been severely limited because space for research within the department has been lacking due to the closure of Frasch Annex. Despite the lack of research labs, faculty have been creative in finding other places, and many with other colleagues, to conduct some research to continue to be active in their fields. Five (55.5%) tenured and tenure-track faculty holding doctorates published in peer reviewed journals. This objective was met.

Three (33.3%) tenured and tenure-track faculty holding doctorates served as peer reviewers for 12 manuscripts. This number is down from the previous year. This objective was not met; however, three faculty members now serve as editors for professional organizations/journals which can affect individual manuscript review. Manuscript review will be addressed at faculty meetings with the understanding that manuscript review requests vary and depend on the journal and need for review. Such action might

#### 2019:

Faculty continue to conduct research. Faculty are encouraged to join appropriate professional societies, to present their findings at professional meetings, and to submit manuscripts to refereed journals. Research activities were severely limited because space for research within the department has been lacking due to the closure of Frasch Annex. The transition into the renovated Frasch Annex has not been without some issues (e.g., electrical outlets did not work, gas leaks, malfunctioning hoods, etc.). 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 also affected the research activity of other faculty members who had to gear up to cover classes. Four (44.4%) tenured and tenure-track faculty holding doctorates published in peer reviewed journals. This objective was not met.

Three (33.3%) tenured and tenure-track faculty holding doctorates served as peer reviewers for professional manuscripts. This number is equal to the previous year. This objective was not met; however, three faculty members serve as editors for professional organizations/journals which can affect individual manuscript review. Manuscript review will be addressed at faculty meetings with the understanding that manuscript review requests vary and depend on the journal and need for review. Such action might increase faculty participation in these efforts. We will continue to address this effort.

#### 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 Frasch 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 bench mark 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-tract 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.

#### 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%

# 2.1.1 Analysis of Data and Plan for Continuous Improvement

2018:

Nine out of 13 (61.5%) faculty in the department gave a total of 55 professional meeting presentations. This objective was met. Professional engagement by faculty will be discussed during faculty meetings.

13 out of 13 (100.0%) faculty in the department attended a total of 31 professional society meetings. This objective was met. Professional engagement by faculty will be discussed during faculty meetings. Professional engagement is critical to remaining current in the discipline/profession and in lecture/lab for student success.

2019:

Seven out of 13 (53.8%) faculty in the department gave a total of 28 professional meeting presentations. This objective was met. Professional engagement by faculty continues to be encouraged during faculty meetings.

Nine out of 13 (69.2%) faculty in the department attended a total of 19 professional society meetings. This objective was not met. Professional engagement by faculty continues to be discussed during faculty meetings. Professional engagement is critical to remaining current in the discipline/profession and in lecture /lab for student success. However, professional engagement has been limited due to teaching overloads and the untimely departure of a key faculty member.

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.

# 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

Academic 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%

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

#### 2018:

Thirteen out of 13 (100.0%) faculty in the department held membership in 53 professional societies. This objective was met. Discussions will ensue regarding the importance of professional society memberships.

10 out of 13 (76.9%) faculty in the department participated in activities of professional societies. This objective was met. During faculty meetings, we will suggest ways faculty members can become more active in their societies, e.g., act as reviewers of society journal articles, serve on editorial advisory boards, participate in activities of society meetings, etc.

### 2019:

Eleven out of 13 (84.6%) faculty in the department held membership in 34 professional societies. This objective was not met. Discussions will ensue regarding the importance of professional society memberships. Professional society memberships also are becoming more expensive and a reflection of membership value is occurring with the current times.

Eight out of 13 (61.5%) faculty in the department participated in activities of professional societies. This objective was met. Faculty are continually being encouraged to become more active in their societies, e.g., act as reviewers of society journal articles, serve on editorial advisory boards, participate in activities of society meetings, etc.

#### 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.

# Performance Objective 6 Utilize resources efficiently and effectively to support the university 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		t Submitted teaching-related proposals the 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%

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

2018:

Seven out of 13 (54%) faculty members submitted 8 teaching-related grant proposals. This objective was 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. Six out of 8 (75%) of the submitted teaching-related proposals were funded. The total amount of funds received from these proposals was \$47,041. Faculty submission of teaching-related and research-related grant and contract proposals will be encouraged. Proposals included: medical research internship opportunities, equipment, STEM opportunity, microscope repair, and educational training.

# 2019:

Nine out of 13 (69.2%) faculty members submitted teaching-related grant proposals. This objective was 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. Seven out of 9 (77%) of the submitted teachingrelated proposals were funded. Endowed Professorships relating to teaching increased significantly this year. The total amount of funds received from these proposals was over \$100K. Faculty submission of teaching-related and research-related grant and contract proposals will be encouraged. Proposals included: teaching equipment upgrades, teaching space/classroom upgrades, STEM opportunity, and educational training.

# 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 teachingrelated 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.

#### 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.

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%

#### 2.1 Data

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%

# 2.1.1 Analysis of Data and Plan for Continuous Improvement

#### 2018:

Seven out of nine (77.8%) tenured and tenure-track faculty holding doctorates submitted a total of nine 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.

Eight out of nine (88.9%) of the submitted research-oriented grant or contract proposals received funding. The total amount of funds received was \$36,200. This objective was met. Faculty submission of research-related grant and contract proposals will be discussed at faculty meetings.

# 2019:

Six out of nine (66.7%) tenured and tenure-track faculty holding doctorates submitted a total of nine 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. Transition/Addition of faculty

members also will affect percentages; hence, any fluctuation will be addressed in the next cycle.

Seven out of 8 (87.5%) of the submitted research-oriented grant or contract proposals received funding. The total amount of funds received was over \$129K, a significant increase due to increased amounts for Endowed Professorships. This objective was met. Faculty submission of research-related grant and contract proposals will be discussed at faculty meetings. Transition/Addition of faculty members also will affect percentages; hence, any fluctuation will be addressed in the next cycle.

# 2020:

Six out of 10 (60%) tenured and tenure-track faculty holding doctorates submitted a total of eight researchoriented 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.

# 3 Assessment and Benchmark

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

# 3.1 Data

# 2018:

At the end of last year's reporting period (December 31, 2017), contractual work was still ongoing. We determined that some equipment was never fixed and replacement through work effort/time and purchase was required. Other equipment/offices needed moving and setup once rooms were deemed operational. These efforts continued through this reporting period. Despite the lack of research labs, faculty have been creative in finding other places, and many with other colleagues, to conduct some research to continue to be active in their fields.

# 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.

# 3.1.1 Analysis of Data and Plan for Continuous Improvement

# 2018:

All research labs in Frasch Annex were closed beginning summer 2014. After a long period of building construction delays for Frasch Annex, the Annex was opened in fall 2017; however, several labs still needed contractual work. At the end of last year's reporting period (December 31, 2017), contractual work was still ongoing. Some equipment was never fixed and replacement through work effort/time and purchase was required. Other equipment/offices needed moving and setup once rooms were deemed operational. These efforts continued through this reporting period. This objective was not met.

# 2019:

Some research faculty have moved into Frasch Annex. Contractual work has ended; however, the Annex facility still has issues that need addressing. These are on a case-by-case basis. Since mechanical /physical performance of space was not completely acceptable, the objective was not met. The Biology Dept. is working with Facilities to address these matters. These efforts continued through this reporting period.

# 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.