

# Biology

#6 Plan cycle - 6 Plan cycle 2020/2021 7/1/20 - 6/30/21

# 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
  - O BIED Biology Education Grades 6-12
  - o MOBI Molecular Biology
  - o PPHA Pre-Pharmacy
  - PRDN Pre-Dentistry
  - o PRMD Pre-Medicine

# 1.1 Data

# 2013-2014:

| Major | Conc.   |     |    | F  | all |     |     |    |    | Sp | oring |     |     |
|-------|---------|-----|----|----|-----|-----|-----|----|----|----|-------|-----|-----|
| Major | Conc.   | F   | S  | J  | Sr  | Т   | СМР | F  | S  | J  | Sr    | Т   | СМР |
|       | BIED    | 0   | 3  | 2  | 1   | 6   | 2   | 4  | 1  | 2  | 1     | 8   | 0   |
|       | МОВІ    | 0   | 1  | 1  | 1   | 3   | 0   | 0  | 1  | 0  | 3     | 4   | 2   |
| BIOS  | PRDN    | 16  | 5  | 7  | 3   | 31  | 0   | 6  | 3  | 4  | 5     | 18  | 2   |
|       | PRMD    | 59  | 17 | 23 | 31  | 118 | 2   | 34 | 24 | 13 | 14    | 85  | 2   |
|       | (blank) | 40  | 24 | 23 | 12  | 103 | 3   | 25 | 20 | 17 | 34    | 96  | 10  |
| Grand | l Total | 115 | 50 | 56 | 48  | 261 | 7   | 69 | 49 | 36 | 57    | 211 | 16  |

# 2014-2015:

| Major | Cono    |     |    | F  | all |     |     |    |    | Sp | oring |     |     |
|-------|---------|-----|----|----|-----|-----|-----|----|----|----|-------|-----|-----|
| Major | Conc.   | F   | S  | J  | Sr  | Т   | СМР | F  | S  | J  | Sr    | Т   | СМР |
|       | BIED    | 3   | 0  | 1  | 1   | 5   | 1   | 4  | 0  | 0  | 0     | 4   | 0   |
|       | МОВІ    | 1   | 1  | 1  | 1   | 4   | 0   | 2  | 1  | 1  | 1     | 5   | 0   |
| BIOS  | PRDN    | 11  | 5  | 3  | 4   | 23  | 0   | 5  | 4  | 3  | 6     | 18  | 3   |
|       | PRMD    | 54  | 27 | 12 | 12  | 105 | 1   | 37 | 25 | 20 | 13    | 95  | 5   |
|       | (blank) | 40  | 20 | 17 | 43  | 120 | 10  | 25 | 21 | 12 | 34    | 92  | 17  |
| Grand | l Total | 109 | 53 | 34 | 61  | 257 | 12  | 73 | 51 | 36 | 54    | 214 | 25  |

# 2015-2016:

| Major   | Conc.   |     |    | F  | all |     |     |     |    | Sp | oring |     |     |
|---------|---------|-----|----|----|-----|-----|-----|-----|----|----|-------|-----|-----|
| iviajoi | Conc.   | F   | S  | J  | Sr  | Т   | СМР | F   | S  | J  | Sr    | Т   | СМР |
|         | BIED    | 3   | 4  | 0  | 0   | 7   | 0   | 2   | 6  | 0  | 0     | 8   | 0   |
|         | MOBI    | 4   | 0  | 0  | 2   | 6   | 0   | 1   | 2  | 0  | 2     | 5   | 2   |
| BIOS    | PRDN    | 12  | 4  | 2  | 4   | 22  | 1   | 6   | 3  | 2  | 2     | 13  | 1   |
|         | PRMD    | 84  | 25 | 22 | 14  | 145 | 0   | 48  | 24 | 17 | 22    | 111 | 3   |
|         | (blank) | 53  | 20 | 19 | 27  | 119 | 3   | 44  | 20 | 25 | 35    | 124 | 11  |
| Grand   | l Total | 156 | 53 | 43 | 47  | 299 | 4   | 101 | 55 | 44 | 61    | 261 | 17  |

# 2016-2017:

| Major | Cono    |     |    | F  | all |     |     |    |    | Sp | oring |     |     |
|-------|---------|-----|----|----|-----|-----|-----|----|----|----|-------|-----|-----|
| Major | Conc.   | F   | S  | J  | Sr  | Т   | СМР | F  | S  | J  | Sr    | Т   | СМР |
|       | BIED    | 0   | 3  | 1  | 0   | 4   | 0   | 0  | 4  | 2  | 0     | 6   | 0   |
|       | МОВІ    | 2   | 1  | 1  | 1   | 5   | 0   | 1  | 2  | 1  | 3     | 7   | 0   |
| BIOS  | PRDN    | 17  | 3  | 3  | 3   | 26  | 0   | 10 | 4  | 2  | 2     | 18  | 1   |
|       | PRMD    | 68  | 38 | 13 | 20  | 139 | 2   | 40 | 30 | 23 | 23    | 116 | 13  |
|       | (blank) | 37  | 23 | 20 | 40  | 120 | 6   | 18 | 29 | 19 | 41    | 107 | 13  |
| Grand | l Total | 124 | 68 | 38 | 64  | 294 | 8   | 69 | 69 | 47 | 69    | 254 | 27  |

# 2017-2018:

| Major | Cono    |     |    | F  | all |     |     |    |    | Sp | ring |     |     |
|-------|---------|-----|----|----|-----|-----|-----|----|----|----|------|-----|-----|
| Major | Conc.   | F   | S  | J  | Sr  | Т   | СМР | F  | S  | J  | Sr   | Т   | СМР |
|       | BIED    | 1   | 1  | 6  | 1   | 9   | 0   | 2  | 0  | 2  | 4    | 8   | 0   |
|       | МОВІ    | 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 | l Total | 143 | 63 | 58 | 63  | 327 | 10  | 90 | 81 | 48 | 74   | 293 | 23  |

# 2018-2019:

| Major   | Conc.   |     |    | F  | all |     |     |    |    | Sp | ring |     |     |
|---------|---------|-----|----|----|-----|-----|-----|----|----|----|------|-----|-----|
| iviajoi | Conc.   | F   | S  | J  | Sr  | Т   | СМР | F  | S  | J  | Sr   | Т   | СМР |
|         | BIED    | 4   | 1  | 0  | 2   | 7   | 0   | 3  | 2  | 0  | 2    | 7   | 0   |
|         | МОВІ    | 4   | 5  | 3  | 9   | 21  | 0   | 4  | 3  | 5  | 8    | 20  | 3   |
| BIOS    | PPHA    | 5   | 2  | 2  | 0   | 9   | 0   | 7  | 1  | 2  | 1    | 11  | 0   |
| ВЮЗ     | 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   | l Total | 130 | 79 | 42 | 75  | 326 | 9   | 78 | 75 | 60 | 72   | 285 | 27  |

# 2019-2020:

| Major | Cono    |    |    | F  | all |     |     |    |    | Sp | ring |     |     |
|-------|---------|----|----|----|-----|-----|-----|----|----|----|------|-----|-----|
| Major | Conc.   | F  | S  | J  | Sr  | Т   | СМР | F  | S  | J  | Sr   | Т   | СМР |
|       | 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   |
| BIOS  | PPHA    | 19 | 6  | 3  | 1   | 29  | 0   | 7  | 6  | 3  | 2    | 18  | 0   |
| ВЮЗ   | 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  |

| <b>Grand Total</b> | 129 | 90 | 60 | 75 | 354 | 11 | 78 | 82 | 69 | 79 | 308 | 21 |
|--------------------|-----|----|----|----|-----|----|----|----|----|----|-----|----|
|--------------------|-----|----|----|----|-----|----|----|----|----|----|-----|----|

# 2020-2021:

| Major | Conc.              |    |    | F  | all |     |     |    |    | Sp | oring |     |     |
|-------|--------------------|----|----|----|-----|-----|-----|----|----|----|-------|-----|-----|
| Major | Conc.              | F  | S  | J  | Sr  | T   | CMP | F  | S  | J  | Sr    | Т   | СМР |
|       | 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   |
| BIOS  | 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  |
| Grand | Grand Total 113 87 |    |    |    | 89  | 366 | 12  | 65 | 70 | 63 | 100   | 298 | 30  |

# Percentage Change between 2017-2018:

| Major | Fall | Total | % Change |
|-------|------|-------|----------|
| BIOS  | 2017 | 327   | -0.305%  |
| ыоз   | 2018 | 326   | -0.305%  |
| Total | 2017 | 327   | -0.305%  |
| Total | 2018 | 326   | -0.305%  |

# Percentage Change between 2018-2019:

| Major | Fall | Total | % Change |
|-------|------|-------|----------|
| BIOS  | 2018 | 326   | 8.589%   |
| БЮЗ   | 2019 | 354   | 0.309%   |
| Total | 2018 | 326   | 8.589%   |
| Total | 2019 | 354   | 0.369%   |

# Percentage Change between 2019-2020:

| Major | Fall | Total | % Change |
|-------|------|-------|----------|
| BIOS  | 2019 | 354   | 3.389%   |
| БЮЗ   | 2020 | 366   | 3.309%   |
| Total | 2019 | 354   | 3.389%   |
| Iotai | 2020 | 366   | 3.369%   |

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

# 2015-2016:

Enrollments in all concentrations besides Pre-Dentistry remained steady or increased. Pre-Dentistry decreased from 31 students in fall 2013 to 22 students in fall 2015.

# 2016-2017:

No action will be taken at this time because total enrollment in the program has increased more than the

Pre-Dentistry decrease.

#### 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.

#### 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  | 20 | 18-20 | 19 | 20 | 19-20 | 20 | 20 | 20-20 | 21 | 20 | 21-20 | 22 | 20 | 22-20 | 23 |
|-------------|-------|----|-------|----|----|-------|----|----|-------|----|----|-------|----|----|-------|----|
| Major Conc. | Conc. | כ  | F     | S  | U  | F     | S  | U  | F     | S  | ט  | F     | S  | U  | F     | S  |
| ECSB        | INBI  | 0  | 3     | 4  | 3  | 7     | 8  | 1  | 6     | 3  |    |       |    |    |       |    |

# **Graduate Completers:**

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

# 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.

# 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 | tion Ra | te |       |     | Gr   | adua | tion R | ate |      |
|-------|----------------|----------------|-------|--------|----|-------|-------|---------|----|-------|-----|------|------|--------|-----|------|
| Major | Cohort<br>Size | Same<br>Major? | 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 |

<sup>\*3</sup> students were previously undeclared before declaring BIOS.

# 2013:

|       |        | _    | Persistence | R        | etention Ra | te       | Gra    | aduation Ra | ite    |
|-------|--------|------|-------------|----------|-------------|----------|--------|-------------|--------|
| Major | Cohort | Same | Rate        | Y1 to Y2 | Y1 to Y3    | Y1 to Y4 | 4-Year | 5-Year      | 6-Year |
| 1     | 1      |      |             |          |             |          |        |             |        |

|      | Size | 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*  | 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 |

<sup>\*2</sup> students were previously undeclared before declaring BIOS.

# 2014:

|       |                |                | Persi | stence |    | R     | etent | ion Ra | te |       |     | Gr   | adua | tion R | ate |      |
|-------|----------------|----------------|-------|--------|----|-------|-------|--------|----|-------|-----|------|------|--------|-----|------|
| Major | Cohort<br>Size | Same<br>Major? | 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 |       |     | Gra         | adua | tion R | ate |      |
|-------|----------------|----------------|-------|--------|----|-------|-------|--------|----|-------|-----|-------------|------|--------|-----|------|
| Major | Cohort<br>Size | Same<br>Major? | R     | ate    | Y1 | to Y2 | Y1    | to Y3  | Y1 | to Y4 | 4-` | <b>Year</b> | 5-\  | ⁄ear   | 6-` | Year |
|       | 0.20           | major.         | #     | %      | #  | %     | #     | %      | #  | %     | #   | %           | #    | %      | #   | %    |
|       |                | Same           | 87    | 69.4   | 58 | 46.8  | 35    | 28.2   | 25 | 20.2  |     |             |      |        |     |      |
| BIOS  | 124            | Changed        | 30    | 24.2   | 39 | 31.5  | 43    | 34.7   | 39 | 31.5  |     |             |      |        |     |      |
|       |                | Total          | 116   | 93.5   | 97 | 78.2  | 78    | 62.9   | 64 | 51.6  |     |             |      |        |     |      |

# 2016:

|       |                |                | Persi | stence |    | R     | etent | ion Ra | te |       |     | Gra         | adua | tion R | ate |      |
|-------|----------------|----------------|-------|--------|----|-------|-------|--------|----|-------|-----|-------------|------|--------|-----|------|
| Major | Cohort<br>Size | Same<br>Major? | R     | ate    | Y1 | to Y2 | Y1    | to Y3  | Y1 | to Y4 | 4-` | <b>Year</b> | 5-\  | ⁄ear   | 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 | Cohort<br>Size | Same<br>Major? | R     | ate    | Y1 | to Y2 | Y1    | to Y3  | Y1 | to Y4 | 4-` | ⁄ear | 5-\  | ⁄ear   | 6-` | ⁄ear |
|       | 0.20           | 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:

| ſ |       |        |        | Persistence | R        | etention Rat | е        | Gra    | aduation R | ate    |
|---|-------|--------|--------|-------------|----------|--------------|----------|--------|------------|--------|
| l | Major | Cohort | Same   | Rate        | Y1 to Y2 | Y1 to Y3     | Y1 to Y4 | 4-Year | 5-Year     | 6-Year |
| ı |       | Size   | Major? |             | 1        | i i          |          |        |            |        |

|      |     |         | #  | %    | #  | %    | #  | %    | # | % | # | % | # | % | # | % |
|------|-----|---------|----|------|----|------|----|------|---|---|---|---|---|---|---|---|
|      |     | Same    | 79 | 68.7 | 58 | 50.4 | 39 | 33.9 |   |   |   |   |   |   |   |   |
| BIOS | 115 | Changed | 20 | 17.4 | 23 | 0.2  | 36 | 31.3 |   |   |   |   |   |   |   |   |
|      |     | Total   | 99 | 86.1 | 81 | 70.4 | 75 | 65.2 |   |   |   |   |   |   |   |   |

# 2019:

|       |                |                | Persi | stence |     | Re    | tentio | on Rat | :e |       |     | Gra  | adua | tion R      | ate |      |
|-------|----------------|----------------|-------|--------|-----|-------|--------|--------|----|-------|-----|------|------|-------------|-----|------|
| Major | Cohort<br>Size | Same<br>Major? | R     | ate    | Y1  | to Y2 | Y1     | to Y3  | Y1 | to Y4 | 4-\ | ⁄ear | 5-`  | <b>Year</b> | 6-` | Year |
|       | 0.20           | major.         | #     | %      | #   | %     | #      | %      | #  | %     | #   | %    | #    | %           | #   | %    |
|       |                | Same           | 87    | 74.4   | 66  | 56.4  |        |        |    |       |     |      |      |             |     |      |
| BIOS  | 117            | Changed        | 23    | 19.7   | 35  | 29.9  |        |        |    |       |     |      |      |             |     |      |
|       |                | Total          | 110   | 94.0   | 101 | 86.3  |        |        |    |       |     |      |      |             |     |      |

#### 2020:

|       |                |                | Persi | stence |    | R     | etent | ion Ra | ite |       |     | Gr   | adua | tion R | ate |      |
|-------|----------------|----------------|-------|--------|----|-------|-------|--------|-----|-------|-----|------|------|--------|-----|------|
| Major | Cohort<br>Size | Same<br>Major? | R     | ate    | Y1 | to Y2 | Y1    | to Y3  | Y1  | to Y4 | 4-` | Year | 5-`  | ⁄ear   | 6-` | ⁄ear |
|       | 0.20           | major.         | #     | %      | #  | %     | #     | %      | #   | %     | #   | %    | #    | %      | #   | %    |
|       |                | Same           | 84    | 76.3   |    |       |       |        |     |       |     |      |      |        |     |      |
| BIOS  | 110            | Changed        | 15    | 13.6   |    |       |       |        |     |       |     |      |      |        |     |      |
|       |                | Total          | 99    | 90.0   |    |       |       |        |     |       |     |      |      |        |     |      |

# 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.

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 50% will serve on college and university committees.

| Faculty that served Year commi |       | •    | Faculty that served on college/univers |     |
|--------------------------------|-------|------|--|-----|
|                                | #     | %    | #                                      | %   |
| 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 comm | d on departmental<br>nittees | Faculty that served on college/university committees |   |  |
|---------------|--------------------------|------------------------------|--|---|--|
|               | #                        | %                            | #  | % |  |

| 2020-2021 | 14/14 | 100% | 10/14 | 71% |
|-----------|-------|------|-------|-----|
| 2021-2022 |       |      |       |     |
| 2022-2023 |       |      |       |     |

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

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

# 2016:

The current level of departmental and community service activities will be maintained.

Faculty will continue to be encouraged to take advantage of opportunities to serve on college and/or university committees. The department head will take advantage of opportunities to recommend faculty to serve on college and/or university committees.

#### 2017:

The current level of departmental service activities is acceptable.

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 faculty. The department head will take advantage of opportunities to recommend faculty to serve on college/university committees.

#### 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.

# 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%.

# 2016:

Ten (77%) of the faculty served as resource persons for the community. This objective was met.

#### 2017:

Ten (76.9%) of the faculty served as resource persons for the community (e.g., plant and animal identification, science fair judging, and biological consultation). This objective was met.

#### 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.

#### 2021.

One (7.1%) faculty member 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

# 2016:

The current level of departmental and community service activities will be maintained.

# 2017:

Upon analysis of the data, the benchmark should be raised to 80%. Inquiries from the community may be routed to additional faculty for consultation.

# 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.

# 3 Assessment and Benchmark

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

#### 3.1 Data

#### 2016:

The department has continued its partnership with the City of Lake Charles to help renovate Tuten Park. Specifically the department is conducting a biodiversity survey of the park in order to provide the city with a species inventory for use in educational programs to be held at the Park. In 2015 the survey was submitted to the City of Lake Charles and will be updated as needed. Ms. Danielle Maxwell is currently chair of the Tuten Park Committee and Dr. Juliana Hinton serves on the community board known as Friends of Tuten Park.

#### 2017:

The department has continued its partnership with the City of Lake Charles to help renovate Tuten Park. Specifically the department is conducting a biodiversity survey of the park to provide the city with a species inventory for use in educational programs to be held at the Park. Beginning in 2015, the survey was submitted to the City of Lake Charles and will be updated as needed. Ms. Danielle Maxwell is currently chair of the Tuten Park Committee and Dr. Juliana Hinton serves on the community board known as Friends of Tuten Park. The department also is involved with the Master Naturalist Program coordinated with Calcasieu Parish Parks and LA Wildlife and Fisheries. Ms. Maxwell is involved in this program.

#### 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.

# 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.

# 3.1.1 Analysis of Data and Plan for Continuous Improvement

#### 2016:

The department will continue to conduct the biological survey of Tuten Park and participate in Friends of

Tuten Park.

#### 2017:

The department will continue to conduct the biological survey of Tuten Park, participate in Friends of Tuten Park, and pursue other biology-associated community/outreach programs.

#### 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."

# 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.

| Year | Students that applied to graduate or professional school | Students accepted into graduate or professional school |       | into graduate or accepted into |       | Gradua<br>unknow | tes with<br>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 | Students accepted into graduate or | Students not accepted into graduate or | Graduates with unknown status |
|---------------|---|------------------------------------|--|-------------------------------|
|---------------|---|------------------------------------|--|-------------------------------|

|           | school | profession | nal school | profession | nal school |   |   |
|-----------|--------|------------|------------|------------|------------|---|---|
|           | #      | #          | %          | #          | %          | # | % |
| 2020-2021 |        |            |            |            |            |   |   |
| 2021-2022 |        |            |            |            |            |   |   |
| 2022-2023 |        |            |            |            |            |   |   |

#### 2016:

The benchmark of 80% was not achieved. Have incorporated career tips in biology in the capstone course. No other actions are anticipated.

#### 2017:

The benchmark of 80% was not achieved. We have incorporated career tips in biology in the capstone course as well as graduate program search methods for students interested in pursuing post-baccalaureate degrees in biology/biology-related fields in the capstone course. Faculty will be encouraged to discuss biology career options with students. We will review the current trend for further action based on next year's assessment of the unknown student status. Email contact may be considered.

#### 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 post-baccalaureate 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.

# 2020-2021:

#### 2 Assessment and Benchmark

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

| Year | Students known to have sought employment after graduation | Students that achieved employment |        | Students wi | th unknown<br>tus |
|------|---|-----------------------------------|--------|-------------|-------------------|
|      | #   | #                                 | %      | #           | %                 |
| 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%             |
|      | Í   | Í                                 |        |             | i                 |

| 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 th emplo | at achieved<br>yment | Students wi | th unknown<br>tus |
|---------------|---|-------------------|----------------------|-------------|-------------------|
|               | #   | #                 | %                    | #           | %                 |
| 2020-2021     |   |                   |                      |             |                   |
| 2021-2022     |   |                   |                      |             |                   |
| 2022-2023     |   |                   |                      |             |                   |

# 2016:

The benchmark of 80% was achieved.

#### 2017:

The benchmark of 80% was not achieved. Have incorporated career tips in biology in the capstone course. Faculty will be encouraged to discuss biology career options with students. We will review the current trend for further action based on next year's assessment of the unknown student status. Email contact may be considered.

# 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.

# 2020-2021:

# 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%.

| 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     |             |
| 2022-2023     |             |

#### 2016:

Faculty members continue to earn high scores on student evaluations. Will consider increasing the benchmark for next year.

#### 2017:

Faculty members continue to earn high scores on student evaluations. There was a slight decrease this year from previous years. The faculty SEIs will continue to be monitored to determine if this decrease is a minor fluctuation or the beginning of a downward trend.

# 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.

# 2 Assessment and Benchmark

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

| Year | 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     |  |       |  |
| 2022-2023     |  |       |  |

#### 2016:

Graduating seniors on average were 90.0% satisfied with their experience in the department. This level of satisfaction is 5.4% lower than last year's average satisfaction level. This objective was met.

# 2017:

Graduating seniors on average were 90.72% satisfied with their experience in the department. This level of satisfaction is 0.72% higher than last year's average satisfaction level which had dropped from the previous year. This objective was met. Student satisfaction will be tracked to see if this is an increasing trend or fluctuation.

#### 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.

#### 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%  |  |

<sup>\*</sup>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     |   |     |  |
| 2022-2023     |   |     |  |

# 3.1.1 Analysis of Data and Plan for Continuous Improvement

# 2016:

The expected level of achievement for faculty attending seminars, workshops, or short courses relevant to teaching or advising had been decreased back to 50% from 100% because this year there was no optional Faculty Retreat at the beginning of the fall semester. The level of expected attendance will be raised back to 100% should a faculty retreat be reinstituted.

# 2017:

All faculty members attended seminars, workshops, or short courses on topics relevant to teaching or advising. This objective was met. Further integration of new pedagogy may benefit student learning.

# 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.

# 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,<br>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 |      |       |      |       | - |
|---------------|------|-------|------|-------|---|
|               | #    | %     | #    | %     |   |
| 2020-2021     | 5/10 | 50.0% | 3/10 | 30.0% |   |
| 2021-2022     |      |       |      |       |   |
| 2022-2023     |      |       |      |       |   |

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

# 2015:

Increase the benchmark for next year to 50%.

# 2016:

Faculty will continue to be encouraged to conduct research, to join professional societies, to present their

findings at professional meetings, and to submit manuscripts to refereed journals. However, research activities are severely limited because space for research within the department is woefully lacking due to the closure of Frasch Annex.

Additionally, faculty have become reluctant to attend scientific meetings due both to university budget constraints (no travel budget) and personal budget constraints (faculty finally only this year had a salary increase after seven years of stagnant salaries).

All of the department's research labs finally reopened in January 2009 following a three year closure due to Hurricane Rita. However, beginning in 2010 plans called for the entire Frasch Annex (where all except for one of the research labs were located) to be closed for renovation for at least one year beginning at some unspecified time in the near future. Late in 2010 we were told that construction would begin in spring 2011 and we began discarding unneeded supplies and surplusing unwanted equipment as well as packing up supplies and equipment to move into storage in the old part of Frasch Hall. However, in early January 2011 we were told that the construction was postponed "until February or March 2012 at the latest" so the labs remained open. In April 2012 the Department was informed that construction would not begin earlier than Spring 2013. The consensus of the faculty who did research in the annex was to continue research activities in the Annex and not move out any research equipment/supplies until construction was eminent. In fall 2012 we were told work would begin in summer 2013, and in spring 2013 we were told work would begin in spring 2014. In spring 2014 we were assured that construction would begin "after summer 2014" and we were told we had to move everything (all equipment, supplies, and movable furniture) out of the Annex by the end of summer 2014, which we did, because construction would begin "during fall 2014". As of the end of this reporting period (December 31, 2015), the Annex continued to be vacant and no construction had begun. However, construction finally began in January 2016. Research is currently being done in two labs in old Frasch Hall (one of the two labs had formerly been the office for Visiting Lecturers), teaching labs, and two faculty offices.

Seven (77.8%) tenured and tenure-track faculty holding doctorates served as peer reviewers for 20 manuscripts. This objective was met.

# 2017:

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 are severely limited because space for research within the department has been lacking due to the closure of Frasch Annex (see below). 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.

After a long period of building construction delays for Frasch Annex, construction finally began in January 2016. Construction was supposed to take one year. In fall 2017, the Annex was finally opened; however, several labs still needed contractual work. At the end of this reporting period (December 31, 2017), contractual work was still ongoing.

Five (55.6%) tenured and tenure-track faculty holding doctorates served as peer reviewers for 14 manuscripts. This objective was met; however, this number is down from the previous year. Faculty will be encouraged to engage with their professional disciplines which might increase faculty participation in these efforts. Manuscript review requests vary and depend on the journal.

# 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 increase faculty participation in these efforts. We will continue to address this effort.

#### 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.

# 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 mic Year presentation |      | Faculty that atte | end at least one<br>al meeting |
|---------------|--|------|-------------------|--------------------------------|
|               | #  | %    | #                 | %                              |
| 2020-2021     | 1/14   | 7.1% | 5/14              | 35.7%                          |
| 2021-2022     |  |      |                   |                                |
| 2022-2023     |  |      |                   |                                |

# 2.1.1 Analysis of Data and Plan for Continuous Improvement

# 2016:

Seven out of 13 (53.8%) faculty in the department gave a total of 43 professional meeting presentations. This objective was met.

Eight out of 13 (61.5%) faculty in the department attended a total of 28 professional society meetings. This objective was not met.

#### 2017

Eight out of 13 (61.5%) faculty in the department gave a total of 56 professional meeting presentations. This objective was met. Increase from the previous year may be based on an additional faculty member presenting. To be reviewed for revision if necessary. Faculty will be encouraged to engage with their professional disciplines.

Eleven out of 13 (84.6%) faculty in the department attended a total of 27 professional society meetings. This objective was met. Faculty will be encouraged to engage with their professional disciplines.

#### 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.

#### 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.

# 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.

| 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 me one professi | mbership in at least ional society | Faculty that particip | pated in activities of all societies |
|---------------|-----------------------------------|------------------------------------|-----------------------|--------------------------------------|
|               | #                                 | %                                  | #                     | %                                    |
| 2020-2021     | 13/14                             | 92.6%                              | 3/14                  | 21.4%                                |
| 2021-2022     |                                   |                                    |                       |                                      |
| 2022-2023     |                                   |                                    |                       |                                      |

#### 2016:

Twelve out of 13 (92.3%) faculty in the department held membership in 50 professional societies. This objective was not met.

Eight out of 13 (61.5%) faculty in the department participated in activities of professional societies. This objective was met.

#### 2017:

Twelve out of 13 (92.3%) faculty in the department held membership in 49 professional societies. This objective was not met. Discussions will ensue regarding the importance of professional society memberships. We will speak to the one faculty member who is not a member of any professional society to ascertain reasons for why membership is not sought.

Seven out of 13 (53.8%) faculty in the department participated in activities of professional societies. This objective was met. 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, etc.

# 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.

# 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 |       | 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     |   |       |  |       |
| 2022-2023     |   |       |  |       |

# 1.1.1 Analysis of Data and Plan for Continuous Improvement

# 2015:

One proposal is still pending. The total amount of funds received from these proposals was \$264,520. Of this total, \$58,200 was the result of interdepartmental collaboration (with the Department of Chemistry and Physics) and \$99,048 was the result of intercollegiate collaboration (with the College of Engineering). We will raise the benchmark to 75%.

# 2016:

Eight out of 13 (62%) faculty members submitted 12 teaching-related grant proposals. This objective was met.

Faculty submission of teaching-related and research-related grant and contract proposals continue to be encouraged. However, research activities are severely limited because space for research within the department is woefully lacking due to the closure of Frasch Annex.

Benchmark was not raised to 75%. Benchmark kept at 50%. Analysis from data concludes the objective was met. All 12 (100%) of the submitted teaching-related proposals were funded. The total amount of funds received from these proposals was \$75,552.

Faculty submission of teaching-related and research-related grant and contract proposals continue to be encouraged. However, research activities are severely limited because space for research within the department is woefully lacking due to the closure of Frasch Annex.

#### 2017:

Eight out of 13 (61.5%) faculty members submitted 10 teaching-related grant proposals. This objective was met. Faculty submission of teaching-related and research-related grant and contract proposals will be encouraged. However, research activities have been limited due to the closure of Frasch Annex.

Analysis from data concludes the objective was met. All 10 (100%) of the submitted teaching-related proposals were funded. The total amount of funds received from these proposals was \$77,516. Faculty submission of teaching-related and research-related grant and contract proposals will be encouraged. However, research activities have been limited due to the closure of Frasch Annex. Please raise the benchmark to 80%.

#### 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 teaching-related 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 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.

# 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     |  |       |   |      |
| 2022-2023     |  |       |   |      |

# 2.1.1 Analysis of Data and Plan for Continuous Improvement

#### 2015:

We will raise the benchmark to 75%

The remaining two were pending at the end of this reporting period. The total amount of funds received was \$43,830. We will raise the benchmark to 75%.

# 2016:

Benchmark was not raised. Eight out of nine (89%) tenured and tenure-track faculty holding doctorates as well as the instructor holding a doctoral degree submitted a total of 12 research-oriented grant or contract proposals. This objective was met.

Benchmark was not raised, however the objective was met for 50% and 75% benchmark. Eleven out of 12 (92%) of the submitted research-oriented grant or contract proposals received funding. The total amount of funds received was \$111,000. The largest single funded grant proposal (\$63,000) was jointed submitted by a faculty member in the Department of Biology and the Department of Agriculture.

# 2017:

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 encouraged. However, research activities have been limited due to the closure of Frasch Annex. Please raise the benchmark to 75%.

Eight out of nine (88.9%) of the submitted research-oriented grant or contract proposals received funding. The total amount of funds received was \$37,600. This objective was met. Faculty submission of research-related grant and contract proposals will be encouraged. However, research activities have been limited due to the closure of Frasch Annex. Please raise the benchmark to 75%.

#### 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 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.

# 3 Assessment and Benchmark

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

# 3.1 Data

# 2016:

Research during this reporting period was done in two labs in old Frasch Hall (one of the two labs had formerly been the office for Visiting Lecturers), teaching labs, and two faculty offices. All research labs in Frasch Annex were closed beginning summer 2014 (see Analysis section). This objective was not met.

#### 2017:

All research labs in Frasch Annex were closed beginning summer 2014 (see Analysis section). Research during this reporting period was done in two labs in old Frasch Hall (one of the two labs had formerly been the office for Visiting Lecturers), teaching labs, and two faculty offices. This objective was not met.

#### 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-tract and tenured faculty all have laboratory research available to them.

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

# 2016:

All of the department's research labs finally reopened in January 2009 following a three year closure due to Hurricane Rita. However, beginning in 2010 plans called for the entire Frasch Annex (where all except for one of the research labs were located) to be closed for renovation for at least one year beginning at some unspecified time in the near future. Late in 2010 we were told that construction would begin in spring 2011 and we began discarding unneeded supplies and surplusing unwanted equipment as well as packing up supplies and equipment to move into storage in the old part of Frasch Hall. However, in early January 2011 we were told that the construction was postponed "until February or March 2012 at the latest" so the labs remained open. In April 2012 the Department was informed that construction would not begin earlier than spring 2013. The consensus of the faculty who did research in the annex was to continue research activities in the Annex and not move out any research equipment/supplies until construction was eminent. In fall 2012 we were told work would begin in summer 2013, and in spring 2013 we were told work would begin in spring 2014. In spring 2014 we were assured that construction would begin "after summer 2014" and we were told we had to move everything (all equipment, supplies, and movable furniture) out of the Annex by the end of summer 2014, which we did, because construction would begin "during fall 2014". Construction finally began in January 2016 and was supposed to take one year. At the end of this reporting period (December 31, 2016) construction was still ongoing.

# 2017:

In fall 2017, the Annex was finally opened; however, several labs still needed contractual work. At the end of this reporting period (December 31, 2017), contractual work was still ongoing. Expected completion is in 2018.

#### 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.