

UNIT/PROGRAM NAME:MathematicsOFFICE OF PRIMARY RESPONSIBILITY:Mathematics and ComputingASSESSMENT COORDINATOR:André M. LubeckeSUBMISSION DATE OF THE REPORT:Saturday, September 29, 2018

### ACADEMIC YEAR 2017-2018

### **INSTRUCTIONS:**

To comply with institutional effectiveness expectations, units/programs MUST:

- identify expected outcomes,
- assesses the extent to which it achieves these outcomes, and
- provide evidence of improvement based on analysis of the results

Guidance for preparing Unit Goals and Indicators of Success Reports:

- These reports should demonstrate on-going planning and assessment in each area. The results assist in decision making about curricular and programmatic revisions.
- Describe your <u>Unit/Program Goal</u>. Think about adding new goals or modifying previously reported ones.
- Choose a "Pillar for Success" from Lander's Strategic Plan that your goal best aligns with.
- <u>Timeframe</u>: Each report should use data from the past year. For the Fall 2018 report you should use data from the Academic Year 2017-2018 or Calendar Year 2017. Historical data should be referenced in the Review and Summary of Expected Outcomes section if applicable.
- Use multiple assessments (Indicators of Success) for each Unit Goal if possible. \*If this is a new goal, you may not have collected data yet. This is acceptable and should be indicated.
- Assessment Instruments: Develop and/or use methods and instruments that are uniquely suited to the Indicators of Success.
- <u>Review and Summary of Expected Outcomes</u>:
  - If you are using a goal that you have submitted in the past, please provide a narrative that includes an analysis of historical data and current data. It should include evidence of improvement or clarification of why improvement has not been accomplished. It should include a summary of what steps can be taken to accomplish the goal and what resources are needed to meet the goal or sustain the results.
  - If you are using a new goal and you have collected data, please provide a narrative that includes an analysis of your data and a plan for improvement. This plan should include a summary of what steps can be taken to accomplish the goal and what resources are needed to meet the goal or sustain the results. \*If you are using a new goal and have not yet collected data, please provide a summary of why the goal has been added, how meeting this goal would improve your program/unit, and any expectations that you have for it.

# TABLE OF CONTENTS AND SUMMARY

(Edit document below this Table of Contents and then press Ctrl+8 to update the Table of Contents.)

| 1. | Unit/ | <b>PROGRA</b>  | M GOAL 1: Click here to enter Unit/Program Goal. i.e.: "To demonstrate the ability to…"   | . 8 |  |  |  |  |  |
|----|-------|--|---|-----|--|--|--|--|--|
|    | 1.1.  | STRATEGIC PLANNING FRAMEWORK PILLAR SUPPORTED: Choose a Pillar   |   |     |  |  |  |  |  |
|    | 1.2.  | TIMEFRA  | AME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)                 | . 8 |  |  |  |  |  |
|    | 1.3.  | INDICAT  | ORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES   | . 8 |  |  |  |  |  |
|    | 1.4.  | AVERAGE SCORE FOR ALL INDICATORS OF SUCCESS: Click here to add an average score (i.e.: Outcome 1 Score = 3 + Outcome Score 2 = 1 + Outcome 3 Scor<br>= 1 + Outcome 4 Score = 2 + Outcome 5 Score = 3. Total of Outcome Scores 1 – 5 = 10 ÷ 5 Total Outcomes = 2.00.) |   |     |  |  |  |  |  |
|    | 1.5.  | ASSESSM  | IENT INSTRUMENTS AND FREQUENCY OF ASSESSMENT:   | . 9 |  |  |  |  |  |
|    | 1.6.  | REVIEW   | AND SUMMARY OF EXPECTED OUTCOMES – Date Reviewed: Click here to enter a review date.  | . 9 |  |  |  |  |  |
|    |       | 1.6.1.1.   | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required. | . 9 |  |  |  |  |  |
|    |       | 1.6.1.2.   | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results          | 10  |  |  |  |  |  |
|    |       | 1.6.2.1.   | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required. | 10  |  |  |  |  |  |
|    |       | 1.6.2.2.   | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results          | 10  |  |  |  |  |  |
|    |       | 1.6.3.1.   | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required. | 10  |  |  |  |  |  |
|    |       | 1.6.3.2.   | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results          | 10  |  |  |  |  |  |
|    |       | 1.6.4.1.   | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required. | 10  |  |  |  |  |  |
|    |       | 1.6.4.2.   | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results          | 10  |  |  |  |  |  |
|    |       |  |   |     |  |  |  |  |  |

|   |      | 1.6.5.1.  | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required   | 1  |  |  |
|---|------|---|--|----|--|--|
|   |      | 1.6.5.2.  | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 1  |  |  |
|   | 1.7. | SUMMA   | RY COMMENTS FOR OUTCOMES 1-5:  | 1  |  |  |
|   | 1.8. |   | ES MADE/PROPOSED TO PROGRAM AS A RESULT OF OUTCOMES 1-5: Click here to list the changes made/proposed to the program as a result of an analysis sessment results. Please be concise yet thorough |    |  |  |
| 2.  | UNIT | PROGRA  | M GOAL 2: Click here to enter Unit/Program Goal. i.e.: "To demonstrate the ability to…"  | 12 |  |  |
|   | 2.1. | STRATE  | GIC PLANNING FRAMEWORK PILLAR SUPPORTED: Choose a Pillar   | 12 |  |  |
|   | 2.2. | TIMEFR  | AME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)  | 2  |  |  |
|   | 2.3. | INDICAT   | FORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES   | 12 |  |  |
| 2.4. AVERAGE SCORE FOR ALL INDICATORS OF SUCCESS: Click here to add an average score (i.e.: Outcome 1 Score = 3 + Outcome Score 2 = 1 + = 1 + Outcome 4 Score = 2 + Outcome 5 Score = 3. Total of Outcome Scores 1 – 5 = 10 ÷ 5 Total Outcomes = 2.00.) |      |   |  |    |  |  |
|   | 2.5. | 5. ASSESSMENT INSTRUMENTS AND FREQUENCY OF ASSESSMENT:                                      |  |    |  |  |
|   | 2.6. | REVIEW AND SUMMARY OF EXPECTED OUTCOMES – Date Reviewed: Click here to enter a review date. |  |    |  |  |
|   |      | 2.6.1.1.  | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required.  | 14 |  |  |
|   |      | 2.6.1.2.  | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 4  |  |  |
|   |      | 2.6.2.1.  | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required.  | 14 |  |  |
|   |      | 2.6.2.2.  | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 4  |  |  |
|   |      | 2.6.3.1.  | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required.  | 14 |  |  |
|   |      | 2.6.3.2.  | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 4  |  |  |
|   |      | 2.6.4.1.  | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required.  | 14 |  |  |
|   |      | 2.6.4.2.  | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 4  |  |  |

|    |       | 2.6.5.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required.  | 15 |
|----|-------|----------|--|----|
|    |       | 2.6.5.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 15 |
|    | 2.7.  | SUMMAI   | RY COMMENTS FOR OUTCOMES 1-5:  | 15 |
|    | 2.8.  |          | S MADE/PROPOSED TO PROGRAM AS A RESULT OF OUTCOMES 1-5: Click here to list the changes made/proposed to the program as a result of an analysis sessment results. Please be concise yet thorough  |    |
| 3. | Unit/ | 'PROGRAI | M GOAL 3: Click here to enter Unit/Program Goal. i.e.: "To demonstrate the ability to…"  | 16 |
|    | 3.1.  | STRATE   | GIC PLANNING FRAMEWORK PILLAR SUPPORTED: Choose a Pillar   | 16 |
|    | 3.2.  | TIMEFR   | AME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)  | 16 |
|    | 3.3.  | INDICAT  | ORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES  | 16 |
|    | 3.4.  |          | GE SCORE FOR ALL INDICATORS OF SUCCESS: Click here to add an average score (i.e.: Outcome 1 Score = 3 + Outcome Score 2 = 1 + Outcome 3 Score to the score 4 Score = 2 + Outcome 5 Score = 3. Total of Outcome Scores 1 – 5 = 10 ÷ 5 Total Outcomes = 2.00.) |    |
|    | 3.5.  | ASSESS   | IENT INSTRUMENTS AND FREQUENCY OF ASSESSMENT:  | 17 |
|    | 3.6.  | REVIEW   | AND SUMMARY OF EXPECTED OUTCOMES – Date Reviewed: Click here to enter a review date.   | 18 |
|    |       | 3.6.1.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required.  | 18 |
|    |       | 3.6.1.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 18 |
|    |       | 3.6.2.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required.  | 18 |
|    |       | 3.6.2.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 18 |
|    |       | 3.6.3.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required.  | 18 |
|    |       | 3.6.3.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 18 |
|    |       | 3.6.4.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required.  | 19 |
|    |       | 3.6.4.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 19 |

|    |       | 3.6.5.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required  |
|----|-------|----------|---|
|    |       | 3.6.5.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results  |
|    | 3.7.  | SUMMAI   | RY COMMENTS FOR OUTCOMES 1-5:   |
|    | 3.8.  |          | S MADE/PROPOSED TO PROGRAM AS A RESULT OF OUTCOMES 1-5: Click here to list the changes made/proposed to the program as a result of an analysis sessment results. Please be concise yet thorough   |
| 4. | UNIT/ | PROGRAM  | GOAL 4: Click here to enter Unit/Program Goal. i.e.: "To demonstrate the ability to…"   |
|    | 4.1.  | STRATE   | GIC PLANNING FRAMEWORK PILLAR SUPPORTED: Choose a Pillar  |
|    | 4.2.  | TIMEFRA  | AME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)   |
|    | 4.3.  | INDICAT  | ORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES   |
|    | 4.4.  |          | GE SCORE FOR ALL INDICATORS OF SUCCESS: Click here to add an average score (i.e.: Outcome 1 Score = 3 + Outcome Score 2 = 1 + Outcome 3 Score tcome 4 Score = 2 + Outcome 5 Score = 3. Total of Outcome Scores 1 – 5 = 10 ÷ 5 Total Outcomes = 2.00.) |
|    | 4.5.  | ASSESSM  | 1 INSTRUMENTS AND FREQUENCY OF ASSESSMENT:  |
|    | 4.6.  | REVIEW   | AND SUMMARY OF EXPECTED OUTCOMES - Date Reviewed: Click here to enter a review date   |
|    |       | 4.6.1.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required  |
|    |       | 4.6.1.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results  |
|    |       | 4.6.2.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required  |
|    |       | 4.6.2.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results  |
|    |       | 4.6.3.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required  |
|    |       | 4.6.3.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results  |
|    |       | 4.6.4.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required  |
|    |       | 4.6.4.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results  |

|    |       | 4.6.5.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required   | 3  |
|----|-------|----------|--|----|
|    |       | 4.6.5.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 3  |
|    | 4.7.  | SUMMA    | RY COMMENTS FOR OUTCOMES 1-5:  | 3  |
|    | 4.8.  |          | ES MADE/PROPOSED TO PROGRAM AS A RESULT OF OUTCOMES 1-5: Click here to list the changes made/proposed to the program as a result of an analysis sessment results. Please be concise yet thorough   |    |
| 5۰ | UNIT/ | PROGRA   | M GOAL 5: Click here to enter Unit/Program Goal. i.e.: "To demonstrate the ability to…"  | 4  |
|    | 5.1.  | STRATE   | GIC PLANNING FRAMEWORK PILLAR SUPPORTED: Choose a Pillar   | 4  |
|    | 5.2.  | TIMEFR   | AME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)  | 4  |
|    | 5.3.  | INDICAT  | TORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES   | 4  |
|    | 5.4.  |          | GE SCORE FOR ALL INDICATORS OF SUCCESS: Click here to add an average score (i.e.: Outcome 1 Score = 3 + Outcome Score 2 = 1 + Outcome 3 Score atcome 4 Score = 2 + Outcome 5 Score = 3. Total of Outcome Scores 1 – 5 = 10 ÷ 5 Total Outcomes = 2.00.) |    |
|    | 5.5.  | ASSESSI  | MENT INSTRUMENTS AND FREQUENCY OF ASSESSMENT:  | :5 |
|    | 5.6.  | REVIEW   | AND SUMMARY OF EXPECTED OUTCOMES – Date Reviewed: Click here to enter a review date  | 6  |
|    |       | 5.6.1.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required   | :6 |
|    |       | 5.6.1.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 6  |
|    |       | 5.6.2.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required   | 26 |
|    |       | 5.6.2.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 6  |
|    |       | 5.6.3.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required   | 27 |
|    |       | 5.6.3.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 7  |
|    |       | 5.6.4.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required   | 27 |
|    |       | 5.6.4.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results   | 7  |

|      | 5.6.5.1. | ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required  | 27      |
|------|----------|---|---------|
|      | 5.6.5.2. | EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results  | 27      |
| 5.7. | SUMMAI   | RY COMMENTS FOR OUTCOMES 1-5:   | 27      |
| 5.8. |          | ES MADE/PROPOSED TO PROGRAM AS A RESULT OF OUTCOMES 1-5: Click here to list the changes made/proposed to the program as a result of an analysi sessment results. Please be concise yet thorough | 3<br>27 |

### 1. UNIT/PROGRAM GOAL 1: Students will demonstrate a broad base of mathematical knowledge.

### 1.1. STRATEGIC PLANNING FRAMEWORK PILLAR SUPPORTED: 2. Selective, Competetive Recruitment and Enrollment of Ambitious and Talented Students

1.2. TIMEFRAME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)

| 1.3. INDICATORS OF SUCCESS/STUDEN   | I LEAKNING   | <b>OUTCOMES, SUMMARY OF OUTCO</b>   | ME DATA AND EXPECTED OUTCOM                                   | MES <sup>1</sup>   |                      |
|---|--|---|---|--|----------------------|
| Indicator of Success / Student  | Summary  | Expected Outcome:   | Expected Outcome: Partially                                   | Expected Outcome:  | Score                |
| Learning Outcome  | Data for   | Met   | Met   | Not Met  |                      |
|   | this   | (3)   | (2)   | (1)  |                      |
|   | Timeframe  |   |   |  |                      |
| 1.3.1. Percentile rankings of seniors   | ¼ above  | At least 50% of graduating  | Between 30% and 50% of  | Less than 30% of graduating  | 1.00                 |
| taking MFT  | median; ¼  | seniors score at or above the   | graduating seniors score above                                | seniors score above the  |                      |
|   | below Q1   | national median on the MFT<br>AND no more than 25% of<br>graduating seniors score below<br>the first quartile | the national median   | national median OR more than 50% score below Q1.                     |                      |
| 1.3.2 % Pass rate on the Praxis 2 exam  | 2/2 pass   | 100% pass rate or all but one student   | Above a 90% pass rate or all but one                          | Less than 90% pass rate or more than one failure                     | 3.00                 |
| 1.3.3 Knowledge of Calculus:<br>Student performance on MFT<br>Calculus Subscore | Cohort still<br>open, no<br>data<br>available<br>yet | At least 50% of cohorts have socres above the national median   | At least 40% of cohorts have socres above the national median | Less than 40% of cohorts have<br>socres above the national<br>median | Outcome<br>3: Score. |
| 1.3.4. N/A  | N/A  | N/A   | N/A   | N/A  | Outcome<br>4: Score. |

### 1.3. INDICATORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Expected Outcomes **must** be mutually exclusive for Met, Partially Met and Not Met.

| 1.3.5. N/A | N/A | N/A | N/A | N/A | Outcome   |
|------------|-----|-----|-----|-----|-----------|
|            |     |     |     |     | 5: Score. |

### 1.4. AVERAGE SCORE FOR ALL INDICATORS OF SUCCESS: 2

### 1.5. Assessment Instruments and Frequency of Assessment:

Indicator of **Assessment Instruments Frequency of Assessment** Success Major Field Test in Mathematics Annually to students in MATH 499 1.5.1. PRAXIS 2 Annually to students in Teacher Certification Program 1.5.2. 1.5.3. MFT Calculus subscore Annually to students in MATH 499 N/A N/A 1.5.4. N/A N/A 1.5.5.

1.6. REVIEW AND SUMMARY OF EXPECTED OUTCOMES – Date Reviewed: Click here to enter a review date. (THE FOCUS OF NARRATIVE SHOULD BE ON PROVIDING EVIDENCE OF IMPROVEMENT, BASED ON THE ANALYSIS OF THE ASSESSMENT RESULTS, AND NOT A PLAN FOR IMPROVEMENT):

- 1.6.1. **OUTCOME 1 COMMENTS:** Mathematics Program assessment is in need of serious reconsideration. Data collected has not been used effectively to inform decsicions concerning courses and the program. Discussions will begin during the 2018-2019 academic year.
  - 1.6.1.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required.

- 1.6.1.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 1.6.2. **OUTCOME 2 COMMENTS:** Students continue to be successful on the Praxis exam. No program changes necessary.
  - 1.6.2.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required.
  - 1.6.2.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 1.6.3. **OUTCOME 3 COMMENTS:** Data on subscores needs to be accumulated in at least 2-year cycles in order to have a sufficiently large cohort size. How to use this subscore for program improvement will be part of the Assessment plan discussion.
  - 1.6.3.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required.
  - 1.6.3.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 1.6.4. **OUTCOME 4 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 1.6.4.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required.
  - 1.6.4.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 1.6.5. OUTCOME 5 COMMENTS: Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.

- 1.6.5.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required.
- 1.6.5.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.

Click here to enter a discussion of the assessment results of all Expected Outcomes combined.

### 2. UNIT/PROGRAM GOAL 2: Students in the Mathematics Secondary Certification program willdemonstrate their preparation to teach secondary school level mathematics.

### 2.1. STRATEGIC PLANNING FRAMEWORK PILLAR SUPPORTED: Choose a Pillar

2.2. TIMEFRAME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)

| 2.3. INDICATORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES <sup>2</sup> |                                 |  |  |   |                      |  |  |  |
|--|---------------------------------|--|--|---|----------------------|--|--|--|
| Indicator of Success / Student   | Summary                         | Expected Outcome:  | Expected Outcome: Partially                        | Expected Outcome:   | Score                |  |  |  |
| Learning Outcome   | Data for                        | Met  | Met  | Not Met   |                      |  |  |  |
| 2  | this                            | (3)  | (2)  | (1)   |                      |  |  |  |
|  | Timeframe                       | -  |  |   |                      |  |  |  |
| 2.3.1 PRAXIS 2: Students<br>demonstrate knowledge of<br>mathematical pedagogy in<br>written work and in practice | ½ passed<br>on first<br>attempt | 100% pass rate on first attempt  | At least 90% pass on first attempt, or all but one | Less than 90% pass on first attempt, or more than one failure | 2.00                 |  |  |  |
| 2.3.2 Teacher Work Sample pass rate  | Data not<br>yet<br>available.   | 100% attain an overall portfolio<br>rating of at least 3.0 on 4.0<br>scale | 90% atteain at least a 3.0                         | Less than 90% attain a 3.0                                    | Outcome<br>2: Score. |  |  |  |
| 2.3.3 N/A  | N/A                             | N/A  | N/A  | N/A   | Outcome<br>3: Score. |  |  |  |
| 2.3.4. N/A   | N/A                             | N/A  | N/A  | N/A   | Outcome<br>4: Score. |  |  |  |

### 

<sup>&</sup>lt;sup>2</sup> Expected Outcomes **must** be mutually exclusive for Met, Partially Met and Not Met.

| 2.3.5. N/A | N/A | N/A | N/A | N/A | Outcome |
|------------|-----|-----|-----|-----|---------|
|            |     |     |     |     |         |

2.4. AVERAGE Score FOR ALL INDICATORS OF SUCCESS: Click here to add an average score (i.e.: Outcome 1 Score = 3 + Outcome Score 2 = 1 + Outcome 3 Score = 1 + Outcome 4 Score = 2 + Outcome 5 Score = 3. Total of Outcome Scores 1 - 5 = 10 ÷ 5 Total Outcomes = 2.00.)

### 2.5. Assessment Instruments and Frequency of Assessment:

#### Indicator of Success **Assessment Instruments Frequency of Assessment** PRAXIS 2 Annually to students in Teacher Certification program 2.5.1.**Teacher Work Sample** Annually to students in EDUC 460 2.5.2. N/A N/A 2.5.3. Outcome 4: click here to enter Indicator of Success/Student Learning Outcome 4. N/A N/A 2.5.4. N/A NA 2.5.5.

## 2.6. REVIEW AND SUMMARY OF EXPECTED OUTCOMES – Date Reviewed: Click here to enter a review date. (THE FOCUS OF NARRATIVE SHOULD BE ON PROVIDING EVIDENCE OF IMPROVEMENT, BASED ON THE ANALYSIS OF THE ASSESSMENT RESULTS, AND NOT A PLAN FOR IMPROVEMENT):

2.6.1. OUTCOME 1 COMMENTS: Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.

- 2.6.1.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required.
- 2.6.1.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 2.6.2. OUTCOME 2 COMMENTS: Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 2.6.2.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required.
  - 2.6.2.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 2.6.3. OUTCOME 3 COMMENTS: Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 2.6.3.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required.
  - 2.6.3.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 2.6.4. OUTCOME 4 COMMENTS: Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 2.6.4.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required.
  - 2.6.4.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.

- 2.6.5. OUTCOME 5 COMMENTS: Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 2.6.5.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required.
  - 2.6.5.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.

Click here to enter a discussion of the assessment results of all Expected Outcomes combined.

### 3. UNIT/PROGRAM GOAL 3: Students will communication mathematical ideas effectively.

### 3.1. STRATEGIC PLANNING FRAMEWORK PILLAR SUPPORTED: 3. Robust Student Experience

3.2. TIMEFRAME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)

| 3.3. IN | DICATORS OF SUCCESS/STUDEN    | NT LEARNING ( | OUTCOMES, SUMMARY OF OUTCO       | ME DATA AND EXPECTED OUTCO       | MES <sup>3</sup>                                 |       |
|---------|-------------------------------|---------------|----------------------------------|----------------------------------|--|-------|
| Ir      | ndicator of Success / Student | Summary       | Expected Outcome:                | Expected Outcome: Partially      | Expected Outcome:                                | Score |
|         | Learning Outcome              | Data for      | Met                              | Met                              | Not Met  |       |
|         |                               | this          | (3)                              | (2)                              | (1)  |       |
|         |                               | Timeframe     |                                  |                                  |  |       |
| 3.3.1   | Students display an           | All           | All students score an average    | At least half the students score | Fewer than half the students                     | 3.00  |
|         | understanding of a            | students      | of at least a 3.0 on the item    | an average of at least a 3.0 on  | score an average of at least a                   |       |
|         | mathematical topic in their   | scored at     | "Extends presenters              | the item "Extends presenters     | 3.0 on the item "Extends                         |       |
|         | capstone project              | least a       | mathematical knowledge" on       | mathematical knowledge" on       | presenters mathematical                          |       |
|         |                               | 3.25          | the presentation scoring rubric  | the presentation scoring rubric  | knowledge" on the presentation<br>scoring rubric |       |
| 3.3.2   | 2 Students create a           | All           | All the students score an        | At least half the students score | Fewer than half the students                     | 3.00  |
|         | professional presentation for | students      | average of at least a 3.0 on the | an average of at least a 3.0 on  | score an average of at least a                   |       |
|         | their capstone project        | scored at     | item "Interest and Appeal of     | the item "Interest and Appeal of | 3.0 on the item "Interest and                    |       |
|         |                               | least a       | presentation" on the             | presentation" on the             | Appeal of presentation" on the                   |       |
|         |                               | 3.25          | presentation scoring rubric      | presentation scoring rubric      | presentation scoring rubric                      |       |
| 3.3.3   | Students display good oral    | All           | All students score an average    | At least half the students score | Fewer than half the students                     | 3.00  |
|         | communication skills in their | students      | of at least a 3.0 on the item    | an average of at least a 3.0 on  | score an average of at least a                   |       |
|         | capstone project              | scored at     | "Organization and clarity of     | the item "Interest and Appeal of | 3.0 on the item "Interest and                    |       |
|         | presentation.                 | least a       | presentation" on the             | presentation" on the             | Appeal of presentation" on the                   |       |
|         |                               | 3.25          | presentation scoring rubric      | presentation scoring rubric      | presentation scoring rubric                      |       |
|         |                               |               |                                  |                                  |  |       |

### 3.3. INDICATORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Expected Outcomes **must** be mutually exclusive for Met, Partially Met and Not Met.

| 3.3.4. N/A | N/A | N/A | N/A | N/A | Outcome<br>4: Score. |
|------------|-----|-----|-----|-----|----------------------|
| 3.3.5. N/A | N/A | N/A | N/A | N/A | Outcome<br>5: Score. |

## 3.4. AVERAGE SCORE FOR ALL INDICATORS OF SUCCESS: 3

### 3.5. Assessment Instruments and Frequency of Assessment:

# Indicator

| of      |  |  |
|---------|--|--|
| Success | Assessment Instruments   | Frequency of Assessment  |
| 3.5.1.  | Capstone Presentation Project rubric   | At least 75% receive an average score of 2.0 or more on a 3<br>point scale in the "Understanding of Mathematics" portion of the<br>Presentation rubric |
| 3.5.2.  | Capstone Presentation Project rubric   | Outcome 2: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 2.  |
| 3.5.3.  | Capstone Presentation Project rubric   | Outcome 3: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 3.  |
| 3.5.4.  | Outcome 4: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 4. | Outcome 4: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 4.  |
| 3.5.5.  | Outcome 5: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 5. | Outcome 5: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 5.  |

### 3.6. **REVIEW AND SUMMARY OF EXPECTED OUTCOMES –** Date Reviewed: Click here to enter a review date.

(THE FOCUS OF NARRATIVE SHOULD BE ON PROVIDING EVIDENCE OF IMPROVEMENT, BASED ON THE ANALYSIS OF THE ASSESSMENT RESULTS, AND NOT A PLAN FOR IMPROVEMENT):

- 3.6.1. **OUTCOME 1 COMMENTS:** Instructor in MATH 499 in Spring 2018 did not consider the current assessment plan rubrics and so the data provided is not equivalent to that collected in past years. This will be addressed in conversations about program assessment.
  - 3.6.1.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required.
  - 3.6.1.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 3.6.2. **OUTCOME 2 COMMENTS:** Instructor in MATH 499 in Spring 2018 did not consider the current assessment plan rubrics and so the data provided is not equivalent to that collected in past years. This will be addressed in conversations about program assessment.
  - 3.6.2.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required.
  - 3.6.2.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 3.6.3. **OUTCOME 3 COMMENTS:** Instructor in MATH 499 in Spring 2018 did not consider the current assessment plan rubrics and so the data provided is not equivalent to that collected in past years. This will be addressed in conversations about program assessment.
  - 3.6.3.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required.
  - 3.6.3.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 3.6.4. **OUTCOME 4 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.

- 3.6.4.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required.
- 3.6.4.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 3.6.5. OUTCOME 5 COMMENTS: Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 3.6.5.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required.
  - 3.6.5.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.

Click here to enter a discussion of the assessment results of all Expected Outcomes combined.

### 4. UNIT/PROGRAM GOAL 4: Students demonstrate success in employment and/or graduate-level education, as applicable.

### 4.1. STRATEGIC PLANNING FRAMEWORK PILLAR SUPPORTED: 4. Graduates Who Are Gainfully Employed or Admitted to Graduate School

4.2. TIMEFRAME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)

| Indicator of Success / Student   | Summary   | Expected Outcome:  | Expected Outcome: Partially   | Expected Outcome:  | Score                |
|--|---|--|---|--|----------------------|
| Learning Outcome   | Data for this<br>Timeframe  | Met<br>(3)   | Met<br>(2)  | Not Met<br>(1)   |                      |
| 4.3.1 Students self-report<br>attainment of positions in<br>employment or acceptance<br>to graduate schools. | 3 students<br>reported<br>secured<br>employment,<br>one student<br>considering<br>graduate<br>work. | Outcome 1: click here to enter<br>a specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 1 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which<br>"Meets" the expectations of the<br>unit/program. | Outcome 1: click here to enter<br>a specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 1 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which<br>"Partially Meets" the<br>expectations of the<br>unit/program. | Outcome 1: click here to enter<br>a specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 1 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which "Does<br>Not Meet" the expectations of<br>the unit/program. | Outcome<br>1: Score. |
| 4.3.2 Students self-report<br>significant progress in<br>graduate level studies                              | N/A Alumni<br>Survey not<br>administered<br>as expected<br>in Fall 2017                             | N/A  | N/A   | N/A  | Outcome<br>2: Score. |
| 4.3.: N/A  | N/A   | N/A  | N/A   | N/A  | Outcome<br>3: Score. |

### 4.3. INDICATORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES4

<sup>&</sup>lt;sup>4</sup> Expected Outcomes **must** be mutually exclusive for Met, Partially Met and Not Met.

| 4.3.4 N/A | N/A | N/A | N/A | N/A | Outcome<br>4: Score. |
|-----------|-----|-----|-----|-----|----------------------|
| 4.3.5 N/A | N/A | N/A | N/A | N/A | Outcome<br>5: Score. |

**4.4. AVERAGE Score For ALL INDICATORS OF SUCCESS:** Click here to add an average score (i.e.: Outcome 1 Score = 3 + Outcome Score 2 = 1 + Outcome 3 Score = 1 + Outcome 4 Score = 2 + Outcome 5 Score = 3. Total of Outcome Scores 1 - 5 = 10 ÷ 5 Total Outcomes = 2.00.)

### 4.5. Assessment Instruments and Frequency of Assessment:

| Indicator<br>of |  |   |
|-----------------|--|---|
| Success         | Assessment Instruments   | Frequency of Assessment   |
| 4.5.1.          | Senior Exit interview  | Annually to students in MATH 499  |
| 4.5.2.          | Alumni Survey  | Not administered in 2017 as anticipated   |
| 4.5.3.          | Outcome 3: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 3. | Outcome 3: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 3. |
| 4.5.4.          | Outcome 4: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 4. | Outcome 4: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 4. |
| 4.5.5.          | Outcome 5: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 5. | Outcome 5: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 5. |

### 4.6. **REVIEW AND SUMMARY OF EXPECTED OUTCOMES –** Date Reviewed: Click here to enter a review date.

(THE FOCUS OF NARRATIVE SHOULD BE ON PROVIDING EVIDENCE OF IMPROVEMENT, BASED ON THE ANALYSIS OF THE ASSESSMENT RESULTS, AND NOT A PLAN FOR IMPROVEMENT):

- 4.6.1. **OUTCOME 1 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 4.6.1.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required.
  - 4.6.1.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 4.6.2. **OUTCOME 2 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 4.6.2.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required.
  - 4.6.2.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 4.6.3. **OUTCOME 3 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 4.6.3.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required.
  - 4.6.3.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 4.6.4. **OUTCOME 4 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.

- 4.6.4.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required.
- 4.6.4.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 4.6.5. **OUTCOME 5 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 4.6.5.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required.
  - 4.6.5.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.

Click here to enter a discussion of the assessment results of all Expected Outcomes combined.

### 5. UNIT/PROGRAM GOAL 5: Compliance with Program Productivity Standards as defined by the SC Commission on Higher Education

### 5.1. STRATEGIC PLANNING FRAMEWORK PILLAR SUPPORTED: 7. Financially Stable and Operationally Efficient

### 5.2. TIMEFRAME FOR ASSESSMENT OF THIS GOAL AND INDICATORS OF SUCCESS: Click here to enter Timeframe (Fall 2017, Academic Year 2017-2018, etc.)

| 5.3. INDICATORS OF SUCCESS/STUDE<br>Indicator of Success / Student<br>Learning Outcome | Summary<br>Data for<br>this<br>Timeframe | Expected Outcome:<br>Met<br>(3)  | Expected Outcome: Partially<br>Met<br>(2)   | Expected Outcome:<br>Not Met<br>(1)  | Score                |
|--|--|--|---|--|----------------------|
| 5.3.1 Mathematics Degrees<br>conferred   | Current<br>average is<br>4.8             | Outcome 1: click here to enter a<br>specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 1 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which<br>"Meets" the expectations of the<br>unit/program. | Outcome 1: click here to enter a<br>specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 1 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which<br>"Partially Meets" the<br>expectations of the<br>unit/program. | Outcome 1: click here to enter a<br>specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 1 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which "Does<br>Not Meet" the expectations of<br>the unit/program. | Outcome<br>1: Score. |
| 5.3.2 Mathematics major<br>headcount   | Current<br>average is<br>61.8            | Outcome 2: click here to enter a<br>specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 2 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which<br>"Partially Meets" the<br>expectations of the     | Outcome 2: click here to enter a<br>specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 2 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which<br>"Partially Meets" the<br>expectations of the                  | Outcome 2: click here to enter a<br>specific and measurable<br>outcome for Indicator of<br>Success/Student Learning<br>Outcome 2 (i.e.: a score, a<br>range of scores) describing a<br>level of attainment which "Does<br>Not Meet" the expectations of<br>the unit/program. | Outcome<br>2: Score. |

### 5.3. INDICATORS OF SUCCESS/STUDENT LEARNING OUTCOMES, SUMMARY OF OUTCOME DATA AND EXPECTED OUTCOMES<sup>5</sup>

<sup>5</sup> Expected Outcomes **must** be mutually exclusive for Met, Partially Met and Not Met.

|            |     | unit/program. | unit/program. |     |                      |
|------------|-----|---------------|---------------|-----|----------------------|
| 5.3.3 N/A  | N/A | N/A           | N/A           | N/A | Outcome<br>3: Score. |
| 5.3.4. N/A | N/A | N/A           | N/A           | N/A | Outcome<br>4: Score. |
| 5.3.5. N/A | N/A | N/A           | N/A           | N/A | Outcome<br>5: Score. |

5.4. AVERAGE Score For ALL INDICATORS OF SUCCESS: Click here to add an average score (i.e.: Outcome 1 Score = 3 + Outcome Score 2 = 1 + Outcome 3 Score = 1 + Outcome 4 Score = 2 + Outcome 5 Score = 3. Total of Outcome Scores 1 – 5 = 10 ÷ 5 Total Outcomes = 2.00.)

### 5.5. Assessment Instruments and Frequency of Assessment:

| Indicator<br>of |  |  |
|-----------------|--|--|
| Success         | Assessment Instruments   | Frequency of Assessment  |
| 5.5.1.          | Informtation provided by Lander University IA office   | Outcome 1: click here to enter the frequency of assessment for<br>Indicator of Success/Student Learning Outcome 1. |
| 5.5.2.          | Outcome 2: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 2. | Outcome 2: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 2.    |
| 5.5.3.          | Outcome 3: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 3. | Outcome 3: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 3.    |

| 5.5.4. | Outcome 4: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 4. | Outcome 4: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 4. |
|--------|--|---|
| 5.5.5. | Outcome 5: click here to enter the assessment instrument used for Indicator of Success/Student Learning Outcome 5. | Outcome 5: click here to enter the frequency of assessment for Indicator of Success/Student Learning Outcome 5. |

5.6. REVIEW AND SUMMARY OF EXPECTED OUTCOMES – Date Reviewed: Click here to enter a review date. (THE FOCUS OF NARRATIVE SHOULD BE ON PROVIDING EVIDENCE OF IMPROVEMENT, BASED ON THE ANALYSIS OF THE ASSESSMENT RESULTS, AND NOT A PLAN FOR IMPROVEMENT):

- 5.6.1. **OUTCOME 1 COMMENTS:** Because of the size of Lander University, it is not reasonable to expect the mathematics program to meet CHE program requirements that are designed for institutions more than triple the size of Lander.
  - 5.6.1.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 1: Click here to enter dollar amount/other resources required.
  - 5.6.1.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 5.6.2. **OUTCOME 2 COMMENTS:** Student Headcount can often be met as students enter as freshman planning to pursue the dual-degree engineering program with Clemson University, but then many cannot successfully complete the calculus sequence and change their major.
  - 5.6.2.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 2: Click here to enter dollar amount/other resources required.
  - 5.6.2.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 5.6.3. **OUTCOME 3 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.

- 5.6.3.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 3: Click here to enter dollar amount/other resources required.
- 5.6.3.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 5.6.4. **OUTCOME 4 COMMENTS:** Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 5.6.4.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 4: Click here to enter dollar amount/other resources required.
  - 5.6.4.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.
- 5.6.5. OUTCOME 5 COMMENTS: Click here to enter a discussion of the assessment results and actions taken to improve the unit/program based on an analysis of assessment data.
  - 5.6.5.1. ADDITIONAL RESOURCES REQUIRED TO ACHIEVE OR SUSTAIN RESULTS FOR INDICATOR OF SUCCESS 5: Click here to enter dollar amount/other resources required.
  - 5.6.5.2. EXPLANATION OF HOW RESOURCES WILL BE USED: Click here to enter explanation of how the resources will be used to achieve or sustain results.

Click here to enter a discussion of the assessment results of all Expected Outcomes combined.