**MATH 126E Precalculus I Expanded**

**Section Number(s): 1003**

**Instructor: Daniel T. Murphree**

**Academic Year: 2021-2022**

**Semester: Fall**

**# of Students: 30**

**Complete and submit your assessment report electronically to your department chair. Course and general education outcomes are counted as achieved if 62% or more of students answered the problems associated with the outcome correctly.** **As needed, please attach supporting documents and/or a narrative description of the assessment activities.**

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| **General Education Objectives** | **Class/Course Outcomes** | **Assessment Measures** | **Course Outcome Assessment Results** | **General Education Outcome Assessment Results** | **Outcome Results Analysis** |
|  | In the boxes below, summarize the outcomes assessed in your class or course during the last year*.* If this is a GenEd class, include the appropriate GenEd objectives. | In the boxes below, list the proctored assignments and which problems on those assignments you used to assess each outcome. | In the boxes below, give the percentage of students who answered the problems correctly and indicate if the course outcome was achieved. | In the boxes below, give the weighted average of the percentages of students who met course learning outcomes and indicate if the general education outcome was achieved. | In the boxes below, please reflect on this outcome’s results and summarize how you plan to use the results to improve student learning. |
| Demonstrate knowledge of mathematical notation and concepts. | **Outcome #1:**  Analyze functions and relations including, but not limited to, power, polynomial, rational, exponential, and logarithmic functions. | Proctored assignments:  Midterm and Final  Problem numbers:  5.3.3  5.5.12  4.1.55  3.1.10 | Results:  5.3.3: 53.33%  5.5.12: 20%  4.1.55: 30%  3.1.10: 75%  Average: 44.58%  Criterion Met: No | Average percentage: 51.18%  Criterion Met: No | 1. Results Analysis: Students did not achieve any of the learning outcomes in these sections. They struggled with every topic.  2. Action Plan: I feel like I need to re-think how I’m doing this entire class. See notes below. |
| **Continued:** Demonstrate knowledge of mathematical notation and concepts. | **Outcome #2:**  Solve Equations and Systems of Linear and nonlinear equations. | Proctored assignment:  Problem numbers:  6.5.21  11.1.3  11.3.13 | Results:  6.5.21: 53.33%  11.1.3: 66.67%  11.3.13: 53.33%  Average: 57.78%  Criterion Met: No |
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| Apply mathematical concepts and operations in proper written or graphical format | **Outcome #3:**  Sketch and interpret graphs of functions and relations. | Proctored assignment:  Problem numbers:  3.3.1  2.3.12  6.1.6 | Results:  3.3.1: 60%  2.3.12: 60%  6.1.6: 80%  Average: 66.67%  Criterion Met: Yes | Average percentage: 58.76%  Criterion Met: No | 1. Results Analysis: Here the students barely met the course learning outcome for sketching and interpreting graphs and did not do well at all with preforming operations with functions resulting in not achieving the general education outcome.  2. Action Plan: I feel like I need to re-think how I’m doing this entire class. See notes below. |
| **Outcome #4:**  Perform operations with and on functions | Proctored assignment:  Problem Numbers:  4.4.14  6.4.1 | Results:  4.4.14: 35%  6.4.1: 66.67%  Average: 50.84%  Criterion Met: No |
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| Apply relevant mathematical skills in solving real-world problems. | **Outcome #5:**  Use functions and relations to solve real-world problems. | Proctored assignments: Midterm and Final Exams  Problem numbers:  1.9.15  6.2.10 | Results:  1.9.15: 10%  6.2.10: 40%  Average: 25%  Criterion Met: No | Average percentage: 25%  Criterion Met: No | 1. Results Analysis: The students came nowhere close to meeting this learning outcome. “Real world” problems are always difficult, but these reflect a fundamental lack of understanding.  2. Action Plan: I feel like I need to re-think how I’m doing this entire class. See notes below. |

**Notes: I was very disappointed in how this class went. 13 students failed the course and 6 withdrew leaving only a 36% success rate. None of the general education outcomes were achieved by the students who remained in the course and most of the students who failed the course simply stopped working and gave up. This was my first time building the corequisite course and I think that I did not set it up correctly at all. I plan to completely rethink the MATH 26/126E course. The department has chosen to move back to MyMathLab for this course, which I think will be very helpful from the start. I feel like one of the major difficulties for students was simply how much there was to cover in these two courses together. I plan to set up the courses to run as one again, but this time I plan to set it up so that students can work through MATH 26 quickly by skipping thorough the topics they already know well. This will give them more time with the MATH 126E topics which they had to rush through nearer to the end last time.**

I have reviewed this report:

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Department Chair Dean

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Vice President of Academic Affairs and Student Services

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