**MATH 126 Precalculus I**

**Section Number(s): 1004**

**Instructor: Krishna Subedi**

**Academic Year: 2020-2021**

**Semester: Spring 2021**

**Number of Students in the class: 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. All the learning outcomes must be completed otherwise the assessment is considered as incomplete.**

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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 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 knowledgeOf mathematical notation and concepts | **Outcome #1: Solve a variety of equations including polynomial, exponential and logarithmic**.  | Proctored assignment:Final ExamProblem numbers: #12, 13, 14 | Results: Average percentage: 67.6%Criterion Met: **Yes**/No | Average percentage: 69.7%Criterion Met: **Yes**/No | 1. There are six outcomes under “Demonstrate knowledge Of mathematical notation and concepts”. Only two of these outcomes met the departmental criterion. It looks like students are having trouble in finding difference quotients and factoring using synthetic division.
2. These two topics are difficult to understand on their own, so I’m planning to hold volunteer tutoring so that I can explain those concepts. I’m confident that students will do much if I can teach them in person. If that is not possible then I will make the video of those topics in which students are struggling.
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| **Outcome #2: Operate on functions, including basic mathematical operations, composition and inversion** | Proctored assignment:Final ExamProblem numbers: #3, 4, 5 | Results:Average percentage: 34.3%Criterion Met: Yes/**No** |
| **Outcome #3:** **Use the properties of logarithms** | Proctored assignment:Final ExamProblem numbers: #15 | Results:Average percentage:58%Criterion Met:Yes/**No** |  |
| **Outcome #4: Analyze functions by finding roots turning points, and asymptotes** | Proctored assignment:Final ExamProblem numbers: #7, 8, 9 | Results:Average percentage: 51.3 %Criterion Met:Yes/**No** |
| **Outcome #5: Solving nonlinear inequalities** | Proctored assignment:Midterm ExamProblem numbers: NA | Results:Average percentage: NACriterion Met:Yes/No |
| **Outcome #6:** **Find the partial fraction decomposition of a rational expression** | Proctored assignment:Final ExamProblem numbers: NA | Results: NAAverage percentage: NACriterion Met:Yes/No |
| **Outcome #7:** **Manipulate complex numbers and understand their relationship to the solutions of polynomial and rational equations** | Proctored assignment:Final ExamProblem numbers: #6 | Results:Average percentage: 1%Criterion Met:Yes/**No** |
| **Outcome #8:** **Solve systems of equations using various methods including elimination, matrices, and determinants** | Proctored assignment:Final ExamProblem numbers: #21 | Results:Average percentage: 71%Criterion Met:**Yes**/No |
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| Apply mathematical concepts and operations in proper written or graphical format | **Outcome #9:** Graph a variety of functions including logarithmic, polynomial, rational, and exponential functions  | Proctored assignment:Graphing ExamProblem numbers: #10,11,12 | Results:Average percentage: 58.3%Criterion Met: Yes/**No** | Average percentage:66.8%Criterion Met: **Yes**/No | 1. Results Analysis: On this category, students are doing well and met the departmental criterion, however, students are having difficulty on shifting and translation exponential functions. 2. Action Plan: I will find group of students having difficult on these areas and ask them to attend office hours or tutoring so that I can explain concepts. In addition, I will post this video on Canvas, so that they can watch later.  |
| **Outcome #10: Identify, obtain, and graph the equations of circles and parabolas** | Proctored assignment:Graphing ExamProblem numbers: #1, 2 | Results:Average percentage: 84%Criterion Met: **Yes**/No |
| **Outcome #11: Demonstrate the appropriate mathematical format and notation in solving problems** | Non-Proctored Exam:Graphing ExamProblem numbers: # 12, 13  | Results:Average percentage: 81%Criterion Met: **Yes**/No |
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| **Apply relevant mathematical skills in solving real-word problems** | **Outcome #12**Use mathematical functions to model real-world phenomena | Proctored assignment:Midterm ExamProblem numbers: #7, 9 | Results:Average percentage: 70%Criterion Met: **Yes**/No | Average percentage: 66%Criterion Met: **Yes**/No | 1. Results Analysis:2. Action Plan:  |

**Notes:**

I have reviewed this report:

Krishna Subedi

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Instructor Dean

Date: 05/25/2021 Date\_\_\_\_\_\_\_\_\_­\_\_\_\_\_\_

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Vice President of Academic Affairs and Student Services

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