**ASSESSMENT REPORTING FORM (Benchmark)**

**MAT141**

**(To be Completed by Faculty)**

|  |
| --- |
| **Program or Course:** MAT141 College Mathematics |
| **Date:** 1/14/21 |
| **Number of Student Participants:** All Spring 2020 and Fall 2020 MAT141 students |
| **Number of Faculty/Staff Participants:** All Spring 2020 and Fall 2020 MAT141 instructors |
| **Name of person completing report:** Beverly Demaline |
| **Assessment Reporting Form:** This report is to show that assessment is occurring and that the results are being used to make changes to improve student learning. The assessment being reported could be an assessment of a Program Learning Outcome (PLO) or a Measurable Student Level Outcome (MSLO). Each program should be assessing and gathering data for at least two PLOs OR two MSLOs that contain CSLOs each year. |
| **1. What PLOs and/or MSLOs and CSLOs did you assess this year?**  4. (Application level) Use geometric figures (circle, square, rectangle, triangle) to model problems and apply the appropriate formula of measurement to find the missing quantity. (CSLO 3)  7. (Application Level) Apply concepts of simple and compound interest, amortization, and annuities to solve finance application problems. (CSLO 1,2,4)  8. (Application Level) Apply the rules of exponents and logarithms to solve exponential growth and decay problems. (CSLO 1) |
| **2. Describe the assessment method used and criteria for successful achievement of student learning outcomes. (e.g., rubrics, licensing exam, internship, portfolio, exam, research paper, performance exam, EAC, etc.)**  Three questions from the common midterm exam was used for the assessment. |
| **3. How many students were proficient in the PLOs OR MSLOs and CSLOs and how many were not? What was determined as proficient? (i.e. 70% = proficient)**  All MAT141 students were assessed during spring 2020 and fall 2020. Plans to reassess are in place for spring 2021.  For MSLO 4 (geometry) the average student score was 0.8/1.  For MSLO 7 (financial math) the average student score was 0.57/1.  For MSLO 8 (exponents) the average student score was 0.7/1.  Area to focus for improvement: MSLO 7 (financial math) |
| **4. What changes/improvements were made or will be made in response to the outcomes of the assessment process?**  Accessibility to graphing calculators is critical for college level math students. The cost of this technology can be a barrier to students. Fortunately, the math division has recently developed a graphing calculator check out program on campus. Unfortunately, with Covid, we have had to put the program on hold. Our assessment results and discussions verified that not all MAT141 students had graphing calculators and those that did were not always skilled at using them. Our primary goal is to improve graphing calculator availability by sharing free virtual downloads with students such as TI 90-day free trial, wabbit and desmos. Graphing calculator workshops will be developed and time in class will be allotted for student to explore virtual graphing calculators. We will better support students with video instruction in how to download these free resources which can be challenging. A secondary goal is to emphasize rounding methods specific to the financial mathematics unit. Again, the goal is to ensure all students have a graphing calculator and know how to use it. However, it is common in this unit that students will find the correct answer on their calculator but then round incorrectly. In financial mathematics it is often necessary to “round up” even though conventional rounding may either “round up” or “round down”. This is confusing to many MAT141 students and will be emphasized during instruction as part of our improvement plan. |