**APR Report for the Academic Year 2021-2022  
*2022-2023 Cycle***

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| **Section I: Program Description** |

**IA1. Program Title**

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| MATH SCI Mathematics |

**IB. Program Contact (Your first and last name)**

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| Mike Mayfield |

**IC. Program Mission Statement**

Provide the Program’s Mission Statement.

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| The Department of Mathematics has a mission to provide all mathematics students with an understanding of the logical structure and style of mathematics appropriate to their discipline and level. We will provide math transfer students with the background necessary to pursue a meaningful career in mathematics or related fields. We will provide basic skills and general education students the tools and strategies necessary to prepare for successful roles in an ever-changing society. |

**ID. Program Summary**

Provide a brief summary on the current status of the program being reviewed.

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| The basic skills courses provide a foundation for students to earn an associate degree or move on to transferrable level courses in math or science. Due to AB705 these offerings are being reduced substantially. The transferrable level courses provide the necessary mathematical foundation to transfer into four-year programs in math or other fields. Due to AB705 these offerings are being increased to meet growing student needs. |

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| **Section II: Looking Back—2021-2022** |

**IIA. Present the Results** (Rubric Criterion 3)

Provide a descriptive summary of the outcomes from the 2021-2022 cycle of program review –if your program’s 2020-21 goals have been funded, please provide updates here as well.

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| The online proctoring software funded by the District is called Respondus and Respondus Monitor. The department uses Respondus Monitor to lockdown the student’s browser while testing online.  Fulltime math faculty are currently using laptops that are under 5 years old and are in compliance with the Technology Master plan. Current technology is crucial for Faculty to continue to deliver high level instruction and to provide the various modes of delivery for online and in person teaching. The department plans to continue to adhere to the 5-year replacement cycle for instructional technology.  The COR for Linear Algebra has been approved by the curriculum committee and the department is awaiting UC approval. The department plans to offer the course for the first time in Spring 2023.  The department continues to decrease the non-transfer level offerings and are increasing the transfer level options with the addition of Math 1505 and Math 1510. We are also increasing the number of sections offered for our current transfer level courses. We need to continue to communicate with counseling to ensure students are aware of the new Math 1505 and Math 1510 transfer level courses. Math 2125 has also been added as transfer level course.  The department continue to provide and/or investigate other resources to support students in transferable level math courses due to AB705 (i.e., Free printing, math lab review sessions, tutoring, etc.) |

**IIB. Probe the Results: I Wonder . . .** (Rubric Criteria 1, 3)

In this section, judge whether the activities you implemented in 2021-2022 to reach your goals were effective. Did the activities have an effect on the outcome? Please describe WHY you believe your outcomes came out the way they did. Did you reach your goals? If yes, explain why. If you did not reach your goals, explain why.

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| As the college returned to in person instruction in Fall 2021 the math department Faculty faced new challenges which included managing student’s Covid related absences and being prepared to transition in person classes to online (if instructor contracted Covid). The testing hub enabled Faculty to offer make-up exams to students who missed exams due to Covid which in turn helped those students be more successful in their classes. Faculty also needed to remain prepared to transition from in person classes to online if they became ill with Covid. Having the necessary up-to-date technology facilitated this transition when needed.  The bulbs in the projectors in S6 and S7 burned out during the Spring 2022 semester and due to supply chain issues IT was unable to replace them in a timely manner. It is critical to in person instruction that the technology in the classrooms continue to be maintained and upgraded as needed.  During the pandemic the library began checking out iPads, calculators, laptops, and hotspots to students. This service has continued as the campus has reopened and students have greatly benefited by being able to check out technology from a central location.  The math lab returned to in-person services which included Full-time Tutors, student tutors, Math Faculty in the lab, free printing, and updated computers. The math department worked with the Learning Center coordinator to promote/increase the use of the services which included offering incentives for visiting the math lab, teaching targeted calculus reviews, promoting specific math topics review, and by encouraging students to “bring a friend” to the math lab. The Math department believes the District needs to continue to offer this important support service to help meet the needs of AB 705 and increase student success. |

**IIC. Ideate Innovations: What if . . .** (Rubric Criteria 1, 5)

In this section, describe activities you believe would have an effect on your 2022-2023 outcome measures.

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| All sections of STAT 1510 currently utilize an OER textbook from OpenStax which allows students to access and download the textbook for free, which is highly desirable for students. This textbook along with the calculators/iPads in the library that are dedicated to STAT 1510 which students can check out for free for the semester allows STAT 1510 to have a ZTC designation on the course schedule. This means that other than tuition and a nominal cost for the TC-Stats app for students using iPads, there is no additional cost that students will incur for taking this course. The department has looked at incorporating OER textbooks in other courses with plans to utilize an OER textbook for the new Linear Algebra course being offered in Spring 2023.  Due to the AB1705, the Math department will not be able to offer pre-transfer level math classes outside of a few exceptions. However, there are still numerous students who don’t feel prepared to jump straight into transfer level math classes, and the state has said that these students would best benefit from transfer level courses that have a corequisite structure where they can review the necessary topics as they are learning new material. In response to this, the Math department submitted COR’s, DL approval forms, and SLO forms to the curriculum committee for new support classes that would serve as corequisites for many of the transfer level classes currently offered including Math 1500, Math 1505, Math 1520, Math 1530, and Math 1540. These classes would be offered and available to all students with an emphasis on two groups. The first group is students who feel they want additional preparation for their transfer level math class to maximize their probability of successfully completing the course. The second group would be incoming HS students who fall below a certain GPA threshold (dictated by the state). Reports done by the state have found that students in this GPA group would greatly benefit from having a support course that went along with the transfer level math class they are enrolled in. In late September 2021, the new “Temporary Testing Hub” opened to serve students who needed to make-up tests due to Covid, athletic competition, or required DSPS accommodations. The math department encourages the District to continue to provide this important service. Having a testing center available for students who may experience test anxiety to occasionally have a limited amount of extra time on an exam will help them be more successful. Especially with the implementation of AB 705 and students starting in transferrable math courses. Also, having this service available to our students may provide another incentive for students to choose Taft College over another institution.  With the implementation of AB705, the math department began the transition to offering more transfer level classes to better support students and increase the number of students passing a transfer level math class within their first year. With AB1705, the math department will no longer be able to offer pre-transfer level math classes to students, with a few exceptions. Due to this transition, the math department has submitted the paperwork to remove Math 1060 from the list of local graduation requirements and replacing it with a transfer level math class. This will better help align the local graduation requirements with the state’s desire to have students enroll in and complete a transfer level math class within their first year. |

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| **Section III: Looking Forward—2022-2023** |

**III. List Your 2022-2023 Goals—Be Quantitative!**

List your 2022-2023 APR goals in terms of their expected changes on the outcome measures as indicated earlier. Each goal that requires resources, impacts other areas, or otherwise is substantive requires the submission of an APR Goal form. Keep in mind the scoring rubric criteria:

1. The relationship between program review narrative and the APR Goal is evident and strongly supported by evidence.
2. The APR Goal directly implements institutional planning document goals.
3. The outcome directly implements institutional planning outcomes and is transferrable and/or scalable institutionally.
4. APR Outcome indicators, methods and/or timelines use institutional measures, transferrable/scalable institutionally
5. Before/after benchmarks and timelines are completely specified, identical methods, transferrable/scalable.

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| Offer face-to-face courses Math 1060, Math 1500, Math 1505, Math 1530, Math 1540, Math 2100, Math 2200, and Stat 1510 in a block schedule format (i.e., two days a week versus four days a week) to minimize student’s trips to campus and increase enrollment.  Continue to advocate for testing hub services for all TC students.  Continue to advocate for Math Faculty Hours in the math lab. |
| **Section IV (Optional): Evaluation of Program Review and Planning Process** |

**IVA. Evaluation of Program Review and Program Planning Process**

In this cycle of program review, what aspects of the program review and program planning process worked best and why?

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| We appreciate the option to continue with the current Program Review process and hope the new 3-year cycle process will be an easy transition. |

**IVB. Evaluation of Program Review and Program Planning Process**

In this cycle of program review, what aspects of the program review and program planning process would you change and why?

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| None |