

# **Moorpark College Sabbatical Leave Proposal**

**by Renée Butler**

## **Mathematics Department**

I respectfully request a one semester sabbatical leave for the Fall semester of 2023. My plan for a sabbatical leave is to research the effects of the new laws AB 705 and AB 1705 at various colleges in California and the successful methods other math departments are using. In consultation with our math department faculty, I will develop a successful strategy for our students who are not prepared for a transfer level math course. I am in my 9<sup>th</sup> year of teaching full time at Moorpark College and have not had a sabbatical leave.

### Goals and Objectives

The purpose of my sabbatical leave is to improve the success rate of our students to pass their transferable math class within a year. My goal is to research various models of curriculum, workshops, support classes and successful best practices from other community colleges in California that have also faced the implementation of AB 705 (Irwin) and now are facing together the solidification of that law with another law AB 1705 (Irwin) here upon after a two-year learning loss from the global pandemic. These two laws, in short, allow all students to enroll in a transferable math class without having to take a remedial math course, mainly MATH M03 Intermediate Algebra and also requires students to pass their transferable math class within one year. My objective is to find ways to help students be successful in these

transferable math classes, mainly MATH M05 College Algebra for STEM Studies and MATH M11 College Algebra for the Liberal Arts, while still holding high expectations for the content of our math courses. We have seen firsthand, and have heard from other colleges throughout the state, that support classes are not as effective as we had hope they would be. Our dean, Matt Calfin, attended several conferences this summer and brought back to us the information that the support classes are not working at colleges throughout the state. Furthermore, students are not signing up for these support classes; they do not want to be in a math class an extra hour each week. This was explained to me by my math chair, Phil Abramoff. I plan to adopt and adapt successful pathways for our students which includes a non-credit math that prepares students for college algebra, as well as any successful program that has made progress at other colleges and organizations. I will connect and confer with other math faculty at these colleges and at math conferences such as AMATYC (American Mathematical Association of Two-Year Colleges) and CMC<sup>3</sup> (California Mathematics Council Community Colleges). The goal is to implement strategies to our math department for students to be successful, as stated in our district VCCCD's mission statement, "to support student learning" and to be "committed to excellence in serving the diverse needs of its educational institutions, constituent groups, and communities."

### Background and Evidence of Preparations

I have been a full-time faculty member in the math department at Moorpark College since 2014, and a math instructor in the VCCCD since 2002. Going back further, my teaching career began in the Spring of 1992. Throughout my career I have experienced a great deal in the field of education and how the pressure and changes of our culture and society affects the

education of our students in our schools. I have seen the “pendulum swing” in every direction possible for best practices and methods for educating students in mathematics with consideration to the many changes our society has gone through over the last three decades. Now we are facing a new hurdle that the laws AB 705 and AB 1705 have given us. At Moorpark College and at several other community colleges in California, we can no longer offer classes that prepare our students to take transfer level math classes mainly MATH M03 Intermediate Algebra. This affects, and in my opinion discriminates, against several groups of people including, but not limited to, students coming from other countries that did not have, or could not afford, any education; students from disadvantage backgrounds; students who have no support system from their families; students who drop out of high school and then later return to college to get an education. Coupled with the learning loss from COVID-19, students are in desperate need of help with their math skills. Just recently, for example, in my MATH M16A Applied Calculus I class I asked my students if they would like to review the natural logarithm before we learn how to differentiate it. One student responded that he does not even know what a logarithm is. How can this be, I asked myself? I am seeing evidence of not only students being very unprepared for college algebra, but also evidence of students who have not even learned the basic concepts of college algebra to be successful in their next math course. Math has layers, like onions, and it is also like a language. It is taught in a sequence of courses in which one class not only teaches the content to the student, but prepares the student for the next course in their educational path. Many students are failing or dropping out of their math class this semester. They are not prepared for such a class, and are very discouraged.

Here at Moorpark College, even before the pandemic, the math department worked tirelessly on many ways to help students to be prepared for and pass MATH M05 and MATH M11 in their first year, and even in their first semester of college. We have used “Just in Time” workshops, we have built Bridge courses into our curriculum, and most recently we created “TAGS” (Tutor-Assisted Gateway Sessions) in which faculty, like me, spent a great deal of our summer working on the materials for these workshop sessions to be held throughout the first half of the Fall semester of 2022.

As a very concerned math instructor, I have been having serious conversations with our math teachers, my chair, my dean, and our VP of AA regarding the learning loss and under preparedness of our students here at Moorpark College. Several of us math instructors have spoken about this at length in our “hallway” conversations and at our math department meetings. I have discussed this with our math chair, Phil Abramoff, and with my dean, Matt Calfin. I also had a long conversation with our VP John Forbes in which he suggested that a non-credit math class is a good strategy to try. I have also spoken with faculty from other districts as well. The math chair at LA Mission College, Bamdad Samii, has told me that their support classes are not working either and they are now holding workshops for students almost every week. I try to have conversations and make connections with as many math instructors that I can. Going to conferences is a good place to do this. As a teacher with a growth mindset for learning best practices for teaching, I have gone to several math conferences and workshops over the past thirty years. Sometimes I attended even when I could not get funding because I know the importance of these conferences and the connections that are made there. Throughout my career, I have attended CMC, CMC<sup>3</sup>, LACTMA, AMATYC, and many more, and I

have presided and presented at a few of these, too. One thing is for certain: teachers need to collaborate with each other to learn and adapt to the ever changing educational “climate” as well as to new laws and programs that are put in place that we as teachers need to be able to adjust to so students can achieve their educational goals.

There is a need to work on improving our mathematics pathways for student’s success here at Moorpark College as communicated in our mission statement. “Through the integration of innovative instruction and customized student support, our programs are designed to achieve equitable outcomes.” As we conform to the laws of AB 705 and AB 1705 that have been place on our math department, we need much work on our innovative instruction to support our students so they can succeed. New strategies, pathways, curriculum, and support need to be implemented to continue our commitment to all of our students with diverse backgrounds and education.

### Project Plan

I propose a one semester sabbatical to do the following research and development during the Fall semester of 2023 to then collaborate with the math department in the Spring semester of 2024 to prepare and plan for implementation starting the Fall semester of 2024. I will research the effects of student’s success, or lack thereof, of their transfer level math courses at other colleges, as well as ours, since the implementation of the new laws AB 705 and AB 1705. I will focus primarily on the courses MATH M05 College Algebra for STEM Studies and MATH M11 College Algebra for the Liberal Arts. I will also research articles, reports, and data from other organizations such as ASCCC (Academic Senate for California Community College)

and CAP (California Acceleration Project). I plan on attending the math conference(s) AMATYC and/or CMC, November 2023, and/or CMC<sup>3</sup>, December 2023, and participate in the workshops at these conferences on the topics of student success in transferable math courses. If the path is to form a non-credit math course to prepare students to successfully pass their transferable math class, specifically MATH M05 or MATH M11, then I will write the curriculum for that course, with collaboration of our math department and approval from our administrators. For the TAG sessions, I will prepare additional activities and worksheets to have more of these workshops that extend throughout the entire semester. And, I will bring back to our math department any other form of support that has been successful at other colleges in California.

## Timeline

Here is the outline of my proposal over a one semester sabbatical to research, create and implement projects to support students and improve their success in college algebra and other transferable math courses.

### August 2023 Research and Data Gathering

- Research the effects of the first law AB 705 since its implementation in January, 2018, specifically success stories.
- Gain an overview of different options that can be implemented for our math department.
- Research what other colleges have already implemented. Contact math departments at our neighboring districts such as LACCD, and at other colleges such as Saddleback College and Cypress College.

- Research articles and data from other institutions such as ASCCC and CAP.

#### September/October 2023 Curriculum and Support

- Interview faculty at other community colleges who have implemented programs into their math curriculum to help students finish their transferable math course within one year.
- Locate faculty at feeder high schools to discuss the transition of high school-to-college now without having MATH M03 Intermediate Algebra offered at the college.
- Coordinate with the math department at Moorpark College with the progress of my research.

#### October/November 2023 Create and Develop

- Develop a plan and possibly new curriculum strengthening support systems for college algebra and other transfer level math courses.
- Develop a plan of action to be implemented for the Fall semester of 2024 found in my research.
- Work together with my math department, dean, and VP of AA to develop the best plan for support for our students including a non-credit course and more TAG sessions.
- Attend CMC and/or AMATYC math conferences and make connections with other math faculty.

#### December 2023 Connections and Planning

- Attend CMC<sup>3</sup> math conference and make connections with other math faculty.

- Create a plan for the math department to implement for the Fall semester of 2024.
- Include best practices that are successful at other colleges.
- Create a center point for connections, such as a CANVAS shell, to save and share materials with math faculty to use, contribute to, and continue to improve upon.
- Continue consultations with the connections I made with other colleges and feeder high schools.
- Form a support group to stay connected and share successes with each other.

### Benefit to the Math Department, the District, and to our Students

The math department at Moorpark College has gone through a great deal of change with the implementation of AB 705. Many of our teachers have worked endless hours creating support classes that are corequisites of our college algebra classes. Throughout the last two years we have seen very little success with support classes. Furthermore, students are not signing up for these support classes; many of these sections had to be cancelled. Students are now failing and dropping out at a much higher rate. Many students are very discouraged; their self-confidence is low. Much time and effort spent working on developing support classes and TAGS between breaks, holidays, and during the summer has taken its toll on the math faculty.

To be able to take a semester to work solely on new strategies, workshops, and curriculum of a non-credit math course would be very helpful and beneficial to our math department. The math department at Moorpark College is awesome, to say the least, but to ask us all to now create something new and different than the support courses that we worked so hard on is very discouraging. We should not need to work during the summer and in between



semesters on more support material because of a law that was passed that affects no other department as it does the math department. The teachers are exhausted and the morale is low. The work that I can do during such a sabbatical will greatly help the math department so that the other math teachers can focus on teaching their students and boost their moral. This will also greatly benefit the district VCCCD to have a successful transfer rate that can continue at Moorpark College and for our entire district. And I will share my outcomes and deliverables with our sister colleges, Oxnard College and Ventura College.

Finally, a strong support program in place in the math department at Moorpark College will greatly increase our student's success rates of transferable math courses within one year. This support will increase student's study skills, decrease their fear of math, boost their confidence, and supplement COVID-19 learning loss. It will encourage a growth mindset for learning the fundamental mathematical knowledge they need to not only be successful, but to continue and to ultimately attain their educational goals.