



WHAT HAS THE MATH DEPARTMENT DONE FOR AB 705 COMPLIANCE FOR FALL 2019

Update Provided By: Sarah Donovan

The Math department has been working hard to embrace the challenges and the opportunities that AB 705 has created. We are mandated by AB 705 to maximize the probability that a student will enter and complete transfer level math within one year. We started this fall by making the required curriculum changes. We needed to change pre-requisites to advisories for all our courses below transfer level. For transfer level courses we needed to add as a pre-requisite the multiple measures placement process. The multiple measures placement process relies on data from the RP group to recommend initial placements for students based on their educational goals, their high school courses, and their high school GPAs. Pei-Lin in research and planning worked tirelessly with us to update and automate the multiple measures process so that all new students who enter their data into CCCApply can be cleared for the appropriate courses. It is impressive how complicated and how many pieces that there are in this process. But it has now been done, so students will be cleared for their courses and receive emails about the best course choices for them. We could not have done it without the hard work and dedication of research and planning. We are also grateful for the assistance of Corrine Kirkbride who has served as a consultant to us this year, she started the multiple measures process with the BSSOT grant before she moved to Pasadena City College and she has continued to serve as a knowledgeable and hardworking resource since then.

It has been a challenging year. Three of our leading edge reform faculty, Corrine Kirkbride, Barbara Villatoro, and Murat Bulut, pursued opportunities to teach at other colleges or work on a doctorate which left us shorthanded. Corrine and Barbara had served as basic skills coordinators and Murat was in the process of applying to be our basic skills coordinator (now success and equity). It was hard to find anyone to take on this task, but eventually Sarah Donovan stepped up. The fall semester was full of meetings as we grappled with how best to serve our students in the new climate that AB 705 has imposed. For our liberal arts students we expect the changes to be good. They will be able to directly enter the transfer courses of Statistics and Mathematical Ideas regardless of their math backgrounds. We have created co-requisite courses for students to take along with these courses to provide things such as just in time remediation and study skills. The colleges in the state that have pioneered this have had good success, particularly with under-represented students. We hope to have similar success. This semester, with some of the last of the BSSOT money, we have been able to have Communities of Practice. The colleges that we are modelling this on have successfully used them to create constructive opportunities for collaboration. We are finding value in them as well.

It is more uncertain what the changes will mean for our BSTEM students. Those that passed their Algebra II equivalents in high school should see few differences. In fall 2019, we will offer only one path through pre-calculus, just the separate courses of Trigonometry and College Algebra (although they can be taken concurrently). This single path should make student choices easier and hopefully lead to higher success and understanding of the material. We are concerned for students interested in STEM



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that were not successful in high school. We will no longer offer either Arithmetic or PreAlgebra, and our sections of Elementary Algebra will be very limited. The statistics of students entering basic skills courses and emerging from those sequences are not good, but we have each had students that needed those courses and gone on to be successful STEM majors. AB 705 expects that the lowest place a STEM major would start would be Intermediate Algebra. We intend to do all that we can to support our students in all of our courses, we just hope it will be enough. We are grateful that the college supports resources such as the Math Activities Center, the ASTC, embedded tutors, and many equity support programs that will be available to our students. While the changes will affect the faculty, the biggest changes will be for the students. Some we expect to thrive with the changes and opportunities, others we expect will need any and every support that we as a college can provide.

It has been a very challenging process that we are undergoing. Our layers of basic skills courses were put in with the best intentions of giving students more opportunities to learn needed material. Our prerequisites were what students needed to succeed in a course and what other colleges needed to have to make our courses transferable. Having the legislature dictate what we can and cannot do has been difficult. Even on campus math faculty have been both bashed for our failings and supported for our efforts. We could not do what we are attempting without the kindness and support of many people. We are now trying to work on guided self-placement to help students such as those without good high school data select the most appropriate course to start in.

Thankfully, fall 2019 is just the start of the changes and we have three years to learn, to grow, and to adapt. As Joe Conrad said it is unlikely that in three years we will be doing the same things that we are doing in fall 2019. We should learn and change over the course of that time. Right now we are making the best.