

Strand B. Designing Precalculus for 2025: An effective single-course prerequisite for Calculus 1 (especially valuable if the state allows in 2025-26 only one prerequisite course for Calculus 1)

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Jeremy at Fresno CC:

1. Multiple Measures with up to two semesters of pre-req – (College Alg + Trig)
OR (Trig + PreCalc)
2. Formed a math faculty workgroup that began meeting Fa23. This group includes our campus AB1705 Taskforce lead, and our director of IR.

We have decided that we are going to work on 2 things in the near future:

- a. Look at data – success rates
- b. The potential need for a 6-unit precalculus course (C-ID 955)
- c. A co-req for Precalc and also for Calc 1

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Katryn at Columbia College:

1. **Two pre-requisites for Calc 1:** A 3 unit one semester trig course and a 5 unit one semester precalculus course.
2. 1 unit support course for trigonometry for the first time last fall. We designed a precalculus support course but have not implemented it, hopefully next year.

We had to reduce our Calculus I and II classes from 5 units to 4 units due to the Associates Transfer Degree in Chemistry being over 60 units so we designed and implemented a 2 unit Calculus I support course which I taught for the first time last fall. This class was a great success, 15 students took the calc support, 1 had a medical incomplete and the 14 others passes calculus.

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Jackie at Delta College:

1. Three options to get to Calculus
 - a. Precalculus I with support -> Precalculus II (this option is open access)
 - b. Precalculus I -> Precalculus II (this option currently requires that students have passed the equivalent of Intermediate Algebra somewhere, at a minimum)
 - c. Precalculus (this is the 6-unit course comparable to C-Id 955).
2. At the request of students, we have developed support curriculum for Precalculus II which is locally approved, but awaiting articulation before we can start offering it. Students who successfully complete Precalc I with support often want a Precalc II with the same features
We are currently developing support for Calculus I

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Marie at Merced College:

1. We currently are offering a trigonometry (3 units) that leads into a precalculus course (4 unit). We offer support courses for all of our transfer level courses.
2. We have curriculum approved for a calculus support class (4 unit lecture with 1 unit lab).
We have a precalculus with support (4 + 1 units).

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Michael at Cerro Coso:

1. Two prerequisites for Calculus I:
4 unit one semester Pre-Calculus: College Algebra course PLUS 4 unit one semester Pre-Calculus: Trigonometry course.
2. We do not yet have a plan on what to do if we are forced into a single pre-requisite course for Calculus I. Our initial thoughts are to combine College Algebra and Trigonometry, but we are unsure how many units that would be.

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Lynn at College Bridge:

In 2016 we found a 4-unit Pre-Calculus course designed by CSUDH that integrated algebra and functions to rebuild students foundational high school math. CSUDH designed the course to prepare students with weak foundations for their calculus program. We implemented the course across six low-performing high schools in LA over four years and used the 11th grade state test as a research metric. The outcomes were promising - underperforming students in the CSUDH course outperformed their peers in Pre-Calc honors or AP Calc on the state test.

3. Moving forward... next steps.... Questions that we have??

- Crossing fingers that we will be able to validate 2 pre-reqs, asking questions, looking at data, collaborating on our own campus and with other campuses.
- Continue to develop and use our co-reqs/support courses for multiple classes (Trig, College Alg, Precalc, and Calculus).
- Would like to hear more about what the support class activities look like. Our faculty are working on meeting to build resources to share across the department and I'm wondering what other schools have done to work on norming across the content.
- Specifically, what versions of precalculus are showing the best success (1 semester vs 2, what unit/hour combinations are being used, including the use of co-reqs).
- Who has experience with the 1 semester 6-unit Precalculus course? Is there data to support its success or lack thereof?