



UW System Math Initiative

Alice Pulvermacher, project director

1668 Van Hise Hall, 1220 Linden Drive
Madison, Wisconsin 53706-1559

Phone: (608) 262-5499

e-mail: apulvermacher@uwsa.edu

UW System Fundamental Features of Co-requisite Developmental Math

Introduction

The UW System Math Initiative goals include reducing the number of students placed into developmental math, improving success in developmental and gateway mathematics in students' first year of college, and ensuring transfer and applicability of gateway mathematics courses. Gateway math courses are the first college-level or foundation math courses for a program of study; they are taken for college credit and apply to the requirements of a degree.

The Math Initiative Project Team has provided institution- and system-level data to ensure data-driven decisions and progress toward those goals. This includes data that highlights success, retention, and equity gaps for students placed into developmental mathematics.

Co-requisite instruction is one strategy some UW System institutions are using to improve success of students in developmental and gateway mathematics in their first year. Co-requisite mathematics is defined, for purposes of the Math Initiative, as follows:

Students receive developmental instruction while enrolled in a traditional single-semester gateway math course, delivered through an aligned developmental course.

A co-requisite math course differs from a pre-requisite math course, which is completed before enrollment in the gateway math course.

The UW System Math Steering Committee (MSC), which includes representation from each institution, developed this document to guide implementation of co-requisite math courses. What follows serves multiple purposes:

- To indicate that—while respecting institutional autonomy—the MSC recognizes the potential of co-requisite math courses to provide developmental instruction for students who have placed just below a gateway math course.
- To guide institutions—the administration, mathematics departments, and mathematics instructors—that choose to develop or continue delivering co-requisite math courses.
- To ensure a common definition of co-requisite developmental mathematics vs. pre-requisite developmental mathematics, including for purposes of data collection, reporting, and transfer.

Lastly, the Math Steering Committee recognizes a co-requisite math course is one of many strategies to improve student success in gateway mathematics. The MSC encourages institutions to continue innovating ways to provide developmental instruction that are beneficial to students.

Essential features to be considered a co-requisite math course within UW System:

- A co-requisite math course provides students with developmental instruction while they are enrolled in a credit-bearing gateway math course.
- The required semester-long co-requisite math course closely aligns with the gateway math course.
 - Content of the co-requisite is tailored to support content of the credit-bearing course and learning competencies needed for subsequent courses.
 - Instructors of co-requisites and gateway courses collaborate so that topics in the co-requisite math course connect to what is being covered in the gateway math course.
- Gateway math course grades are determined by assessments only in the gateway math course. That is, no element of the co-requisite math course contributes to the calculation of the student's grade in the gateway math course.
- The standard in the gateway math course is the same regardless of whether it is accompanied by a co-requisite math course, thus ensuring the transfer and applicability of the gateway math course is unaffected.

UW System institutions offering co-requisites are encouraged to:

- Build informed buy-in by sharing data describing student success in math pathways with math and other department faculty, campus administrators, and advisors.
- Develop policy to clarify questions, such as:
 - How is enrollment in the credit-bearing course tied to enrollment in the co-req?
 - If a student drops one or the other, how is that handled? What happens when a student passes the credit-bearing gateway mathematics course and fails/drops the co-req course?
 - What is the pathway for a student who—having successfully completed a co-req course aligned with Quantitative Reasoning or Statistics—changes majors to one that requires College Algebra?
- Coordinate policy/practice between math and English departments and inform advising for students who place below cut scores in both English and mathematics, considering:
 - What data supports taking these simultaneously or in back-to-back semesters?
 - What data is available on literacy contributing to success in math?
 - How are ESL and international students assessed, placed, and supported, as some may excel in math but have difficulty interpreting math problems in English?
- Provide professional development for instructors to ensure the co-requisite math course is academically engaging and incorporates strategies that support student success, such as active learning.
- Include student learning strategies, such as study skills and habits of mind, with the mathematics content of the co-requisite course.
- Consider ways to foster productive classroom dynamics, avoid co-requisite stigma, and ensure consistent standards in gateway math course sections, such as by balancing co-requisite and non-co-requisite student enrollment within gateway math course sections.
- Continually assess the effectiveness of the co-requisite model, particularly in the areas of success, retention and equity gaps.

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