Math Pathways Professional Development & Implementation

Lunch and Learn: Facilitated by Dr. Melinda J. Anderson October 15, 2024



Our Time Together Today







Review

The Way Forward

Next Steps

Gateway Math Course Pathways

What are Gateway Math Courses?

Gateway math courses form a conceptual framework designed to offer diverse and equitable pathways in mathematics education for students. Unlike the traditional one-size-fits-all approach, gateway math courses recognize that students have varied goals, interests, and strengths. This framework aims to provide a range of learning experiences aligned with students' future aspirations, whether academic, vocational, or technical. By catering to different learning styles and career objectives, this approach not only enhances student engagement but also increases the likelihood of success in both academic and real-world settings.

To that end, public post-secondary institutions in Kansas will offer up to three gateway math courses, giving programs greater flexibility in selecting a math course that aligns with the needs of students. (Institutions are only required to offer the gateway math courses that apply to programs on their campuses.)

These three courses are:

- Elementary Statistics
- Contemporary Math
- College Algebra

How were the decisions made?

The following files contain the gateway math courses by program for each institution. These decisions were made by faculty members from various disciplines who gathered from across the state to discuss the different gateway math courses, review the learning outcomes for each, and select the course that best fits the needs of their students. Chief Academic Officers (CAOs) have confirmed these decisions.

Gateway Math Courses by Program (All Programs/All Institutions)

Gateway Math Courses by Gateway Math Course

- College Algebra
- Contemporary Math
- Elementary Statistics

Math Pathways Timeline

Selection of Gateway Math Courses by Programs

Selection of Multiple Measures for Gateway Courses Professional Development

Design Co-requisite Support

At least 1 section of each Gateway Course

At least 1 section with Co-requisite support

Full implementation

Spring / Summer 2024

Fall 2024 / Spring & Summer 2025

Fall 2025

Fall 2026

Multiple Measures



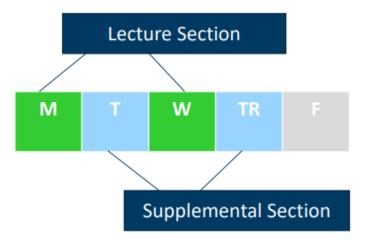


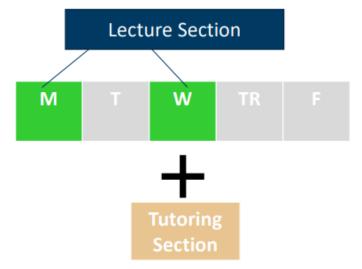
A Systemwide Course Placement Measure Required for the Gateway Math Course Associated with Their Major

Institutionally Designated Course Placement Measure & Professional Discretion.

Corequisite Support Options

- Supplemental Course Selection
- Mandatory Tutoring
- Boot Camp Section
- Compressed Course Section





Dana Center Model

OUR MODEL

The DCMP model consists of four principles that emphasize both structural change and continuous improvement for mathematics pathways.

Institutions implement structural and policy changes quickly and at scale.

Mathematics pathways are structured so that:

PRINCIPLE

1

All students, regardless of college readiness, enter directly into mathematics pathways aligned to programs of study.

PRINCIPLE

2

Students complete their first college-level mathematics requirement in their first year of college.

Institutions and departments engage in a deliberate and thoughtful process of continuous improvement to ensure high-quality, effective instruction.

Students engage in a high-quality learning experience in mathematics pathways that are designed so that:

PRINCIPLE

3

Strategies to support students as learners are integrated into courses and are aligned across the institution.

PRINCIPLE

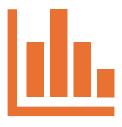


Instruction incorporates evidence-based curriculum and pedagogy.

The Way Forward

What questions do you still have about your work with students and math pathways?

Next Steps



Data



Evaluation



Community Building

Advising Resources

