

Mathematics Update

OMI/OTM

April 27, 2018

Mathematics Update

The Ohio Mathematics Initiative (OMI) is a collaborative effort of mathematics faculty members from the state's public colleges and universities and Ohio high schools that is revisiting and rethinking mathematics courses and curricula and the relationship of mathematics to other disciplines.

One catalyst for the initiative is the need to better align course options to students' academic and career goals.

Concurrent Projects



Multiple Pathways



Revising Guidelines



**More Pathways &
More Guidelines**

Concurrent Projects



Multiple Pathways

nonSTEM

STEM

Statistics ↔ **Quantitative Reasoning**

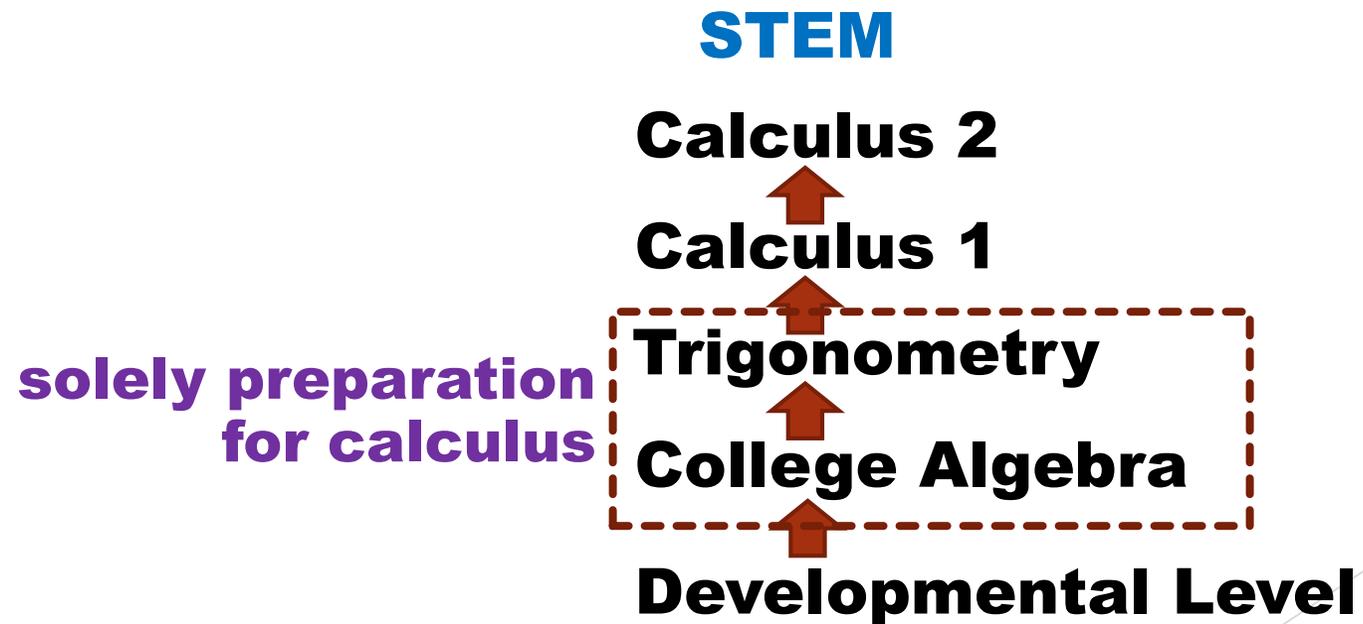
Calculus 2
↑
Calculus 1
↑
Trigonometry
↑
College Algebra
↑
Developmental Level



Concurrent Projects



Multiple Pathways



Concurrent Projects



Revising Guidelines

STEM

Calculus 2



Calculus 1



Trigonometry



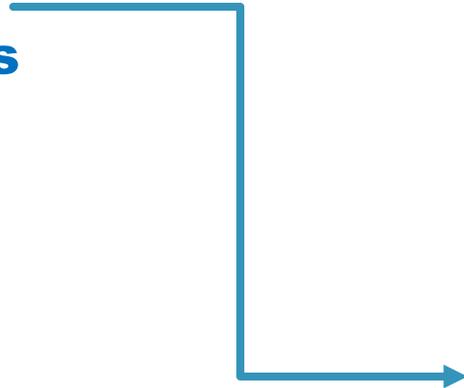
College Algebra



Developmental Level

Intermediate Algebra

**No
Prescribed
Prerequisites**



Concurrent Projects



Revising Guidelines

nonSTEM

**Quantitative
Reasoning**

TMM011

STEM

Calculus 2

Calculus 1

Trigonometry

College Algebra



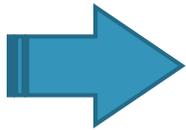
Concurrent Projects

PreCalculus



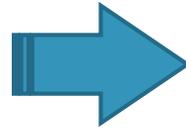
Revising^v Guidelines

Topics Covered



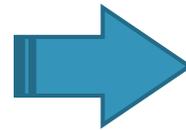
Student Outcomes

Calculus Preparation



Function Language

Calculus Preparation



Elevate Rigor

STEM

Calculus 2



Calculus 1



Trigonometry

TMM003



College Algebra

TMM001

TMM002

PAUSE

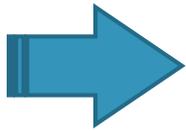
Concurrent Projects

Calculus



Revising^v Guidelines

Topics Covered



Student Outcomes

STEM

Calculus 2

TMM006

Calculus 1

TMM005

Trigonometry

College Algebra

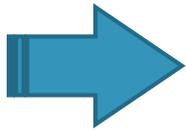
Concurrent Projects

PreCalculus



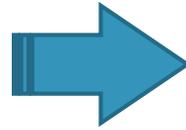
Revising^v Guidelines

Topics Covered



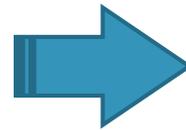
Student Outcomes

Calculus Preparation



Function Language

Calculus Preparation



Elevate Rigor

STEM

Calculus 2



Calculus 1



Trigonometry

TMM003



College Algebra

TMM001

TMM002

UNPAUSE

Concurrent Projects

PreCalculus



Revising^v Guidelines

Calculus Preparation

Function Language

Function Structure

Function Representation

Function Analysis

Composition

Rate of Change

Elevate the Rigor

Independent Reasoning

active learning

STEM

Calculus 2

Calculus 1

Trigonometry

College Algebra

TMM003

TMM001

TMM002

Concurrent Projects



Resequencing Calculus

Related STEM Fields
Math/STEM TAG Panels

- **More Multivariable**

Resequencing

Another Pathway

Options

STEM

Calculus 2

Calculus 1

Trigonometry

College Algebra



Concurrent Projects



More Pathways

Early and Middle Childhood Education

Concurrent Projects



Shorten Pathways



Reduce Cost of Materials



**Discrete Mathematics
Guidelines**

Mathematics Update

OMI/OTM

Lee Wayand : lwayand@csc.edu