Validate that!

Upcoming changes to Area C (math) validation
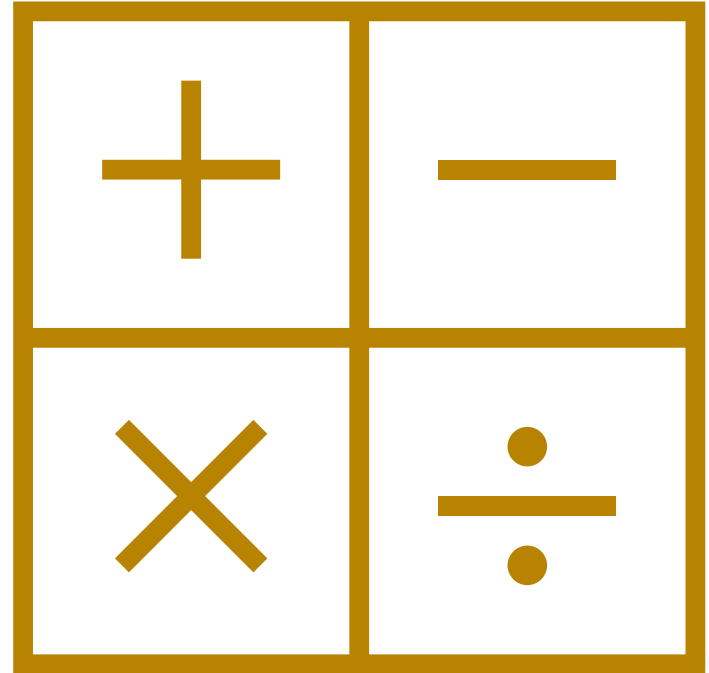
September 2024

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TOPICS FOR DISCUSSION

- Area C (math) description

- Outcomes of faculty workgroup Stage 1 & 2 reports

- Changes to Area C disciplines

- Changes to math validation rules

- Validation scenarios

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Acronyms and terminology used in this session

BOARS

- Board of Admissions & Relations with Schools

ACW

- Area C Workgroup

HSA

- High School Articulation unit

VALIDATION

- When a student has successfully completed advanced work in an area of sequential knowledge, the student is presumed to have mastered the lower-level coursework.

WHAT IS THE AREA C REQUIREMENT?

- Three years of college-prep math including or integrating topics from:

  - Elementary algebra
  - Two- and three-dimensional geometry
  - Advanced algebra

- A fourth year of math is strongly recommended

HAS THE REQUIREMENT CHANGED?

NO!

- UC will continue to accept high-school level math from 7th and 8th grade

- A geometry course – or appropriate integrated math course – must be completed

Area C Workgroup (ACW) outcomes

JULY 2023

- New California Mathematics Framework adopted

- Group of faculty from across UC contacted BOARS with concerns about current high school data science curricula

- BOARS removed their endorsement of data science in the California Math Framework and appointed a workgroup to study Area C

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OCTOBER 2023

- ACW convened to review the Area C requirement

- Members included faculty from across the 10 campuses

- Faculty primarily from Math, Statistics and Computer Science departments

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STAGE 1

- Reconfirmed three foundational years of math

- Advanced math would fall into two categories:
    - Courses that validate Algebra II/Math III
    - Courses that are appropriate for fourth year of math but do not validate Algebra II/Math III
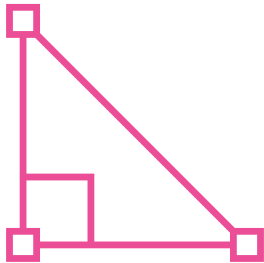
STAGE 2

- CSU faculty added to ACW

- Examined which math coursework is most appropriate and prepares students to be successful at the University

- Proposed two additional categories to distinguish between math courses based on students' interests (major, career, etc.)

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CATEGORY 1

The required foundational math sequence

FOUNDATIONAL DISCIPLINES

- Algebra I
- Geometry
- Algebra II
- Math I
- Math II
- Math III

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ACW math categories: Categories 2 & 3

CATEGORY 2

More advanced courses that validate a foundational course by requiring mastery of the content in the core sequence

- Precalculus

- Calculus

- Other Advanced Math (algebra-based)

CATEGORY 3

Courses that extend foundational knowledge but will **not** validate Algebra II/ Math III

- Statistics

- Additional Math

Courses in these two categories are particularly useful in developing the quantitative skills students are likely to need for college-level coursework

CATEGORY 4

Courses that focus on other topics in math and may align with – but do not necessarily exceed – the foundational knowledge typically found in Algebra II/ Math III; these courses will **not** validate Algebra II/ Math III

- Statistics

- Additional Math

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Timeline

January 2024 – Stage 1 report

May 2024 – Stage 2 report

September 2024 – New disciplines introduced

February 2025 – The 2025-26 course submission period opens with new disciplines

Fall 2025 – All high school math courses will be categorized with new disciplines

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New math disciplines

Current math disciplines through 2024-25 academic year

Foundational math disciplines

- Algebra I
- Geometry
- Algebra II
- Math I
- Math II
- Math III

Math disciplines that validate Algebra II/Math III

- Precalculus
- Calculus
- Statistics
- Other Advanced Math

Math disciplines that do not validate Algebra II/Math III

- Computer Science

Math disciplines beginning 2025-26 academic year

Foundational math	Math disciplines that will validate Algebra II/Math III	Math disciplines that will not validate Algebra II/Math III
• Algebra I • Geometry • Algebra II • Math I • Math II • Math III	• Precalculus • Calculus • Other Advanced Math	• Statistics • Computer Science • Additional Math

WHAT IS 'ADDITIONAL MATH'?

- Courses from categories 3 and 4 as outlined by the ACW Stage 2 report

- Courses may either extend foundational knowledge or may focus on other topics that align with foundational knowledge

- These courses will **not** validate Algebra II/Math III

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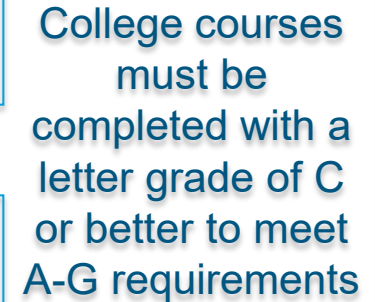## HOW WILL THESE NEW MATH DISCIPLINES AFFECT ADMISSIONS?

- Part of Comprehensive Review

- Extra courses in any subject area are encouraged and viewed positively

- No single course determines an admission decision

- Students should choose math courses that align with their major and career aspirations

What about college coursework/dual enrollment?

BEGINNING AY 2025-26:

- A UC-transferable course in college algebra, precalculus, calculus, linear algebra or differential equations will continue to validate Algebra II/Math III

- A non-transferable course in trigonometry will continue to validate Algebra II/Math III

- College statistics courses **will not validate** Algebra II/Math III

College courses must be completed with a letter grade of C or better to meet A-G requirements

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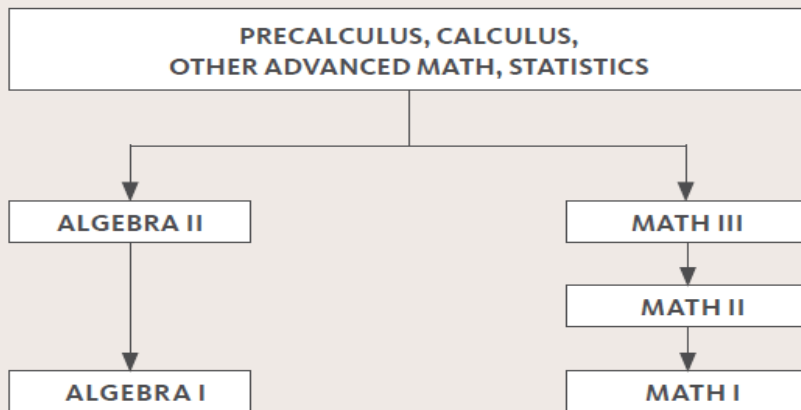**CONFERENCE**

Math validation
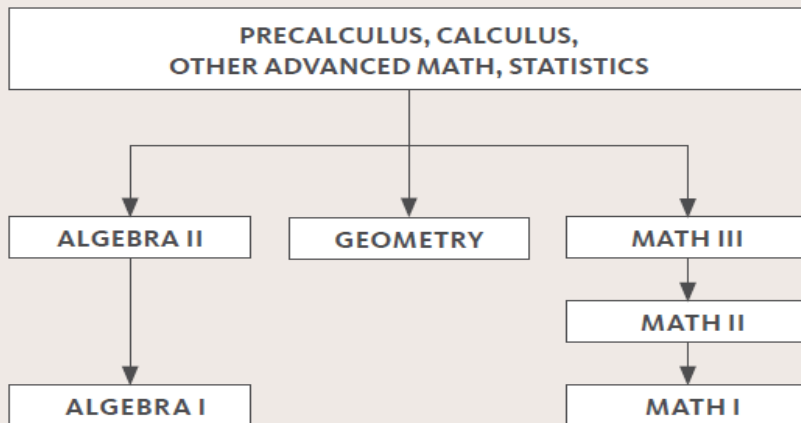
Current math validation rules

THROUGH AY 2024-25:

- Courses from Precalculus, Calculus, Other Advanced Math and Statistics disciplines validate Algebra II/Math III omission and/or deficient grades

- No course validates Geometry *omission*

- Courses from Precalculus, Calculus, Other Advanced Math and Statistics disciplines validate *deficient grades* in Geometry

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Validation of subject omission (through summer 2025)

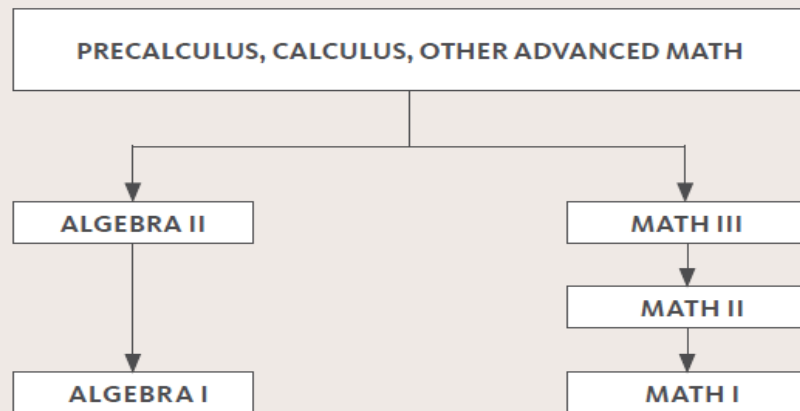Validation of grade deficiencies (through summer 2025)
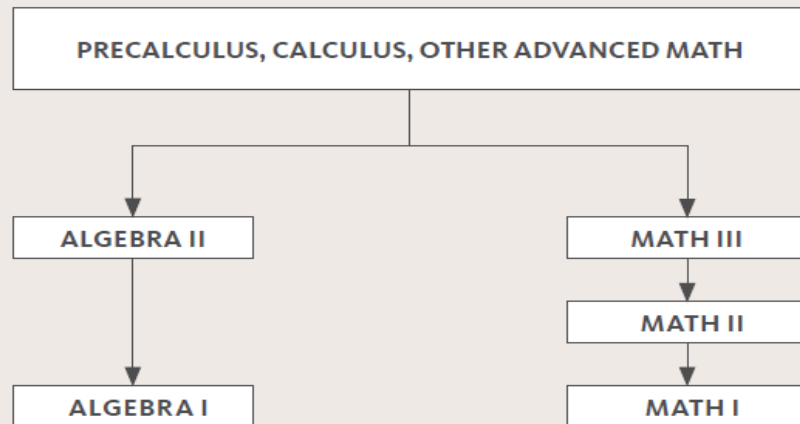
New math validation rules

BEGINNING AY 2025-26:

- Courses from Precalculus, Calculus and Other Advanced Math disciplines validate Algebra II/Math III omission and/or deficient grades

- **No course** validates *omission or deficient grades* in Geometry

Validation of subject omission (beginning fall 2025)

```
         PRECALCULUS, CALCULUS, OTHER ADVANCED MATH

         ALGEBRA II                        MATH III
                                              ↓
                                           MATH II
                                              ↓
         ALGEBRA I                         MATH I
```

Validation of grade deficiencies (beginning fall 2025)

```
         PRECALCULUS, CALCULUS, OTHER ADVANCED MATH

         ALGEBRA II                        MATH III
              ↓                               ↓
                                           MATH II
                                              ↓
         ALGEBRA I                         MATH I
```

Summary of validation changes

BEGINNING FALL 2025/AY 2025-26*:

- Courses from the Statistics discipline will validate **neither** the omission of **nor** deficient grades in Algebra II

- No courses will validate deficient grades in Geometry

- No changes to validation rules for the integrated math sequence

Fall 2025/AY 2025-26 refers to the year the course is taken, not the year a student enters UC

Validation examples

Example #1

SCENARIO

A student earns the following grades:

AY 2022-23:   Algebra 1   C, D

AY 2023-24:   Geometry   D, D

AY 2024-25:   Precalculus   D, C

Has the student met the Area C requirement?

ANSWER

Yes.

The C in second semester Precalculus validates the D in the first semester of Precalculus, the omission of Algebra 2, the D grades in Geometry (through AY 2024-25), and the D grade in second semester Algebra 1.
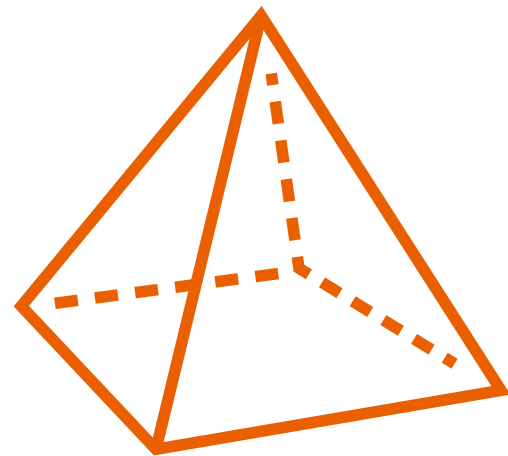
Example #2

SCENARIO

A student completes Geometry in 6th grade, Algebra 2 in 7th grade, Precalculus in 8th grade, and Calculus in 9th grade.

Question: Has the student met the Area C requirement?

Answer: No. Coursework in 6th grade cannot be used to meet any A-G requirements. Therefore, Geometry is considered an omission, and no course will validate the omission of Geometry.

Example #3

SCENARIO

In AY 2024-25, a student completes the first semester of Algebra 2 with a C grade, then drops the second semester of Algebra 2.

Which course taken in AY 2025-26 and passed with a C or better will validate Algebra 2 second semester?

a. **Statistics**   b. **AP Computer Science A**

c. **Calculus**   d. **Data Science**

ANSWER

C: Calculus

Beginning with AY 2025-26, Statistics and Data Science courses will no longer validate Algebra 2. And AP Computer Science A has never validated any lower-level coursework.

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Example #4

SCENARIO

Student completes the following:

Math I   B, B

Math III   D, C

Question: Has the student met the minimum Area C requirement?

Answer: Yes, the C in Math III second semester validates the first semester of Math III and the omission of Math II.
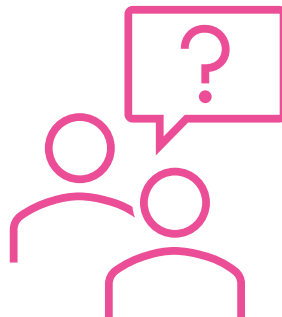
Example #5

SCENARIO

Student completes the following:

Algebra I   B, B

Math III   D, C

Question: Has the student met the minimum Area C requirement?

Answer: No. When students have a combination of stand-alone and integrated math courses, UC defaults to stand-alone validation. Math III is viewed as Algebra 2, which does NOT validate Geometry.

Example #6

SCENARIO

A student earns the following grades:

AY 2024-25   Math III   C, F

Summer 2025 Data Science   C

Has the Algebra II/Math III requirement been met?
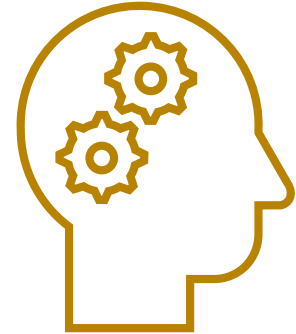
ANSWER

Yes.

Through summer 2025, courses from the Statistics discipline – including Data Science – will continue to validate the omission of and/or deficient grades in Algebra II/Math III.

Example #7

SCENARIO

Beginning fall 2025 (AY 2025-26), which math disciplines will validate the omission of and/or deficient grades in Algebra II/ Math III?

a. Precalculus   b.   Other Advanced Math

c. Calculus   d.   All of the above

Example #8

SCENARIO

Beginning fall 2025 (AY 2025-26), which math disciplines will validate the omission of and/or deficient grades in Geometry?

a. Precalculus   b. Other Advanced Math

c. Calculus   d. None of the above

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Resources

ACW Stage 1 report

ACW Stage 2 report

A-G Policy Resource Guide

Quick Reference Guide to UC Admissions 2024

Thank you