Academic Preparation: Updates and the Future

CAROLINA C CARDENAS
Director, Academic Preparation, Policies and Programs
Overview

• Graduation Initiative 2025
• Academic Preparation
• First-Year Student Outcomes
• Quantitative Reasoning
  • Why
  • What
  • How
• Q&A
CSU Graduation Initiative 2025
## Graduation Initiative 2025 Goals: Ambitious & Attainable

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2018</th>
<th>2025 (Goal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman 4-Year Graduation Rate</td>
<td>19%</td>
<td>25%</td>
<td>40%</td>
</tr>
<tr>
<td>Freshman 6-Year Graduation Rate</td>
<td>57%</td>
<td>61%</td>
<td>70%</td>
</tr>
<tr>
<td>Transfer 2-Year Graduation Rate</td>
<td>31%</td>
<td>38%</td>
<td>45%</td>
</tr>
<tr>
<td>Transfer 4-Year Graduation Rate</td>
<td>73%</td>
<td>77%</td>
<td>85%</td>
</tr>
</tbody>
</table>

**Achieve Equity**
Eliminate all equity gaps for underrepresented minorities and Pell-eligible students.

http://www.dashboard.csuprojects.org/rethinkingthegap/
Academic Preparation
Academic Preparation
Implementation Guidance

• Placement determined by using multiple measures including:
  • Test Scores (CAASPP/EAP, AP, SAT, ACT)
  • High School Coursework
  • High School Grade Point Average (GPA)
  • High School Math GPA
• Student data will be derived from the Cal State Apply application.
Policy Implementation

• The use of multiple measures allows student placement in courses that satisfy CSU Written Communication (A2) and GE Mathematics/Quantitative Reasoning (B4) into one of four categories:
  • **Category I**: Fulfilled the GE area A2 or B4 requirement
  • **Category II**: GE area A2 or B4 course*
  • **Category III**: Supported GE area A2 or B4 course*
  • **Category IV**: Supported GE area A2 or B4 course or the first term of an applicable stretch course
    • Early Start required

*There is a bifurcation for math
Academic Preparation: GPAs

- Calculating Math GPA
  - Area C and G courses with a quantitative reasoning foundation (i.e. courses with math discipline identifiers)
  - loaded from Cal State Apply application
  - Middle school, 9th, 10th, and 11th grade courses

- Calculating High School GPA
  - A-G coursework in 10th and 11th grades

- Campuses may use additional student data to place students in appropriate courses.
Committed to Student Success from High School Preparation to College Graduation

The CSU has transformed academic preparation in an effort to provide all first-time freshman the opportunity and support needed to be successful in college-level coursework. This website provides guidance on new approaches to assessment, placement in General Education (GE) English and math/quantitative reasoning courses and the Early Start Program.

CSU Academic Preparation
The CSU implemented the Academic Preparation policy affording all students the opportunity and support they need to be fully prepared and successful at the CSU.

Try the English and Math Placement Estimator
By assessing the needs of each individual student, this tool will help estimate student placement in first-year English and math courses creating a pathway towards successful learning.

Rethinking the Equity Gap at the CSU
The CSU’s mission is to ensure every student regardless of background has the opportunity to earn a high quality degree in preparation for a lifetime of achievement.
Academic Preparation Brochure

Your Guide to College Success

ACADEMIC PREPARATION: Maximizing Student Success

Use this guide to understand placement in first-year General Education (GE) English and math courses for first-time freshmen and to learn about the CSU's Early Start Program.
First-Year Student Outcomes
### CSU FALL MATH COURSE OUTCOMES

<table>
<thead>
<tr>
<th>Category</th>
<th>MATH 2017</th>
<th>MATH 2018</th>
<th>CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students in Need of Additional Academic Support</td>
<td>17,371</td>
<td>17,417</td>
<td>+46 Students</td>
</tr>
<tr>
<td>Attempted a Lower-Division Course</td>
<td>1,438</td>
<td>11,988</td>
<td>+10,550 Students</td>
</tr>
<tr>
<td>Completed a Lower-Division Course (&quot;C-&quot; or better)</td>
<td>950 (5%)</td>
<td>7,952 (46%)</td>
<td>+41 percentage points</td>
</tr>
</tbody>
</table>
Key Takeaways

• Positive outcomes for students

• Changes will help close equity gaps

• Commitment to continuous improvement

• Fourth-year of quantitative reasoning/math in high school
Quantitative Reasoning
Overview

• Why a quantitative reasoning requirement?

• What is under consideration?

• How would the policy be implemented?
Why a Requirement?

“Genuine equity lies in providing students from all backgrounds with equitable prospects not only for admission and graduation (access), but also for meaningful degrees that prepare them for high value careers after graduation (opportunity).”

~ASCSU QRTF Report
Why a Requirement?

Increase the level of preparation to support student success

<table>
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<tr>
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<th>3 Years of High School Math</th>
<th>4 Years of High School Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduated CSU in 4 Years</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>Graduated CSU in 6 Years</td>
<td>52</td>
<td>64</td>
</tr>
</tbody>
</table>

- **3 Years of High School Math**: 17% Graduated CSU in 4 Years, 52% Graduated CSU in 6 Years
- **4 Years of High School Math**: 26% Graduated CSU in 4 Years, 64% Graduated CSU in 6 Years
Quantitative Reasoning Preparation…

Makes it more likely a student graduates after 6 years

African American  | 50% | Fulfilled Only Existing a-g Requirements
Latinx           | 47% | Additional Year of Quantitative Reasoning (areas 'c' or 'd')
All              | 50% | 62%
Quantitative Reasoning Preparation…

Supports Authentic Access to STEM

• More than half of California high school seniors are interested in pursuing a STEM major in college

• Only 31% met the ACT benchmark for college readiness in STEM
  • 11% of Latinx high school graduates
  • 10% of African American high school graduates
Quantitative Reasoning Preparation…

Supports Authentic Access to STEM

Student Ethnicity (as Self-Reported)

- Asian: 24%
- White: 23%
- Latinx: 14%
- African American: 10%

Percent Earning a Bachelor’s Degree in STEM within the Ethnic Group

CSU Institutional Research & Analyses, 2017-18 degrees
What is under consideration?

• An admission requirement that incoming first-year students must have completed one course of quantitative reasoning

• Requirement could be fulfilled by coursework in science, math or an elective course with a quantitative reasoning foundation
Preliminary Recommendations

• Retain existing 3 years of area “c - mathematics” requirement including Algebra I, Geometry, and Algebra II (or equivalent integrated pathway)

• Add an additional year of area “g – college preparatory elective” that could be fulfilled by a course from area “c – mathematics”, area “d – laboratory science”, or an area “g – college preparatory elective” course with a quantitative reasoning foundation

• Strongly recommend that the additional quantitative reasoning course be completed in the senior year of high school
### Current “a-g” Requirements

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<th>Area</th>
<th>Subject</th>
<th>Courses</th>
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<td>History and Social Science</td>
<td>2</td>
</tr>
<tr>
<td>b.</td>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>c.</td>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>d.</td>
<td>Laboratory Science</td>
<td>2</td>
</tr>
<tr>
<td>e.</td>
<td>Language Other Than English</td>
<td>2</td>
</tr>
<tr>
<td>f.</td>
<td>Visual and Performing Arts</td>
<td>1</td>
</tr>
<tr>
<td>g.</td>
<td>College Preparatory Elective or an additional course from a-f</td>
<td>1</td>
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**Total Required Courses**

| 15 |
## Recommended “a-g” Requirements

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**AND a course from mathematics, laboratory science or select college preparatory electives**

| Total Required Courses | 16 |
Examples of Qualifying Courses

College Preparatory Electives (Area ‘g’)

- Personal Finance
- Introduction to Business
- Coding
- Robotics
- Healthcare Analysis
- Economics
- Agricultural Biology
- Veterinary Science
- Forensics
- Green Technology
- Sports Medicine
- Engineering
- Computer Science
- Game Development
CSU is Partnering with PK-12 Districts to Build Capacity by 2026

• Investing an additional $10 million in STEM teacher preparation
• Providing in-service training and professional development
• Leveraging the CSU Center for Advancement in the Instruction of Quantitative Reasoning
Contact

CSU EAP Coordinators
http://www.calstate.edu/eap/documents/EAPRoster.pdf

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Q&A
Thank you for your support of students!