

October 9, 2017

Dr. Christine Miller
Chair, Academic Senate, California State University
California State University, Office of the Chancellor
401 Golden Shore
Long Beach, California 90802

Dear Dr. Miller:

In this letter, I wish to provide a response to questions that continue to be raised regarding the degree to which [Executive Order \(EO\) 1100 General Education Breadth Requirements-Revised](#) integrates recommended definitions from the *ASCSU Quantitative Reasoning Task Force (QRTF) Report*. The scope of the EO revision was limited to three aims: (1) providing greater clarity, (2) promoting equitable treatment of students and equitable opportunities for academic achievement, and (3) facilitating degree completion. It is left to the ASCSU General Education Task Force to decide larger issues about changing the purpose, size, and required GE distribution areas.

Removing the Singular Universal Intermediate Algebra Prerequisite for All GE Mathematics/Quantitative Reasoning Courses

The recommendation to remove the Intermediate Algebra prerequisite as a requirement for all Subarea B4 courses was supported for five reasons. First, Intermediate Algebra is a high school-level course, and the CSU will no longer offer pre-baccalaureate courses. Second, the prerequisite is redundant with CSU admission requirements because first-time freshmen are required to meet A-G admission requirements, including Algebra II; and admission requirements for California Community College (CCC) students include completion of CSU GE Breadth Subarea B4 course with a C- grade or higher. Third, because the prerequisite was not required consistently in the CSU, the universal requirement for CCC courses represented inequitable standards for students. Fourth, while College Algebra and higher courses will still be required as a prerequisite for Calculus and other courses required in STEM majors, that preparation is not always directly applicable to other majors. Finally, no other GE Area or discipline in systemwide GE policy requires a prerequisite.

The ASCSU Quantitative Reasoning Task Force (QRTF) Recommendation II is for the CSU to “Ensure equitable access and opportunity to all CSU students.” EO 1100 responds to inequities caused by the required intermediate algebra prerequisite for GE Subarea B4 (mathematics/quantitative reasoning) courses, a problem highlighted in the report. The prerequisite is not equitably applied in practice; California Community College (CCC) students are held to meeting that prerequisite, while CSU first-time freshman were not always required to do so. In fact, after EO 1033 in 2008 added the “explicit Intermediate Algebra prerequisite” as a requirement for all Subarea B4 courses, CSU campuses did not

CSU Campuses

Bakersfield
Channel Islands
Chico
Dominguez Hills
East Bay

Fresno
Fullerton
Humboldt
Long Beach
Los Angeles
Maritime Academy

Monterey Bay
Northridge
Pomona
Sacramento
San Bernardino
San Diego

San Francisco
San José
San Luis Obispo
San Marcos
Sonoma
Stanislaus

comply with that added requirement. The QRTF report identified that CCC campuses more strictly adhere to the intermediate algebra GE prerequisite than do CSUs. The task force pointed out that nearly half of CSU Subarea B4 courses do not expect students to use intermediate algebra. Additionally, 42 percent of CSU first-time freshmen satisfy their GE Subarea B4 mathematics/quantitative reasoning requirement with a course that is not algebra intensive. Meanwhile, many CCC students must successfully pass a GE Subarea B4 course with an explicit intermediate algebra prerequisite in order to be admissible to the CSU. For many students, that currently requires first taking a series of remedial mathematics courses. As explained in the task force report:

It is well documented that such course sequences—which may span as many as 3-4 courses—result in very few students ever completing a college-level math class. In fact, students who place into the lowest level of developmental math have only a 1-in-10 chance of ever [complete a college-level math course] (p. 5).

Definition of GE Mathematics/Quantitative Reasoning

As specified in my March 7, 2017 letter to you (attached), the definition for subarea B4 reflects concepts in the recommended definition appearing on page 9 of the QRTF Report. Key outcomes included “applying concepts,” “reasoning quantitatively,” “communicating,” “solving problems,” for example. The EO definition reads:

Through courses in Subarea B4 students shall demonstrate the abilities to reason quantitatively, practice computational skills, and explain and apply mathematical or quantitative reasoning concepts to solve problems. Courses in this Subarea shall include a prerequisite reflective only of skills and knowledge required in the course. In addition to traditional mathematics, courses in Subarea B4 may include computer science, personal finance, statistics or discipline-based mathematics or quantitative reasoning courses, for example.

Per [EO 1110 Assessment of Academic Preparation and Placement in First-Year General Education Written Communication and Mathematics/Quantitative Reasoning Courses](#), all CSU courses will be at the baccalaureate level; and per [EO 167 Transfer of Credit](#), baccalaureate courses transferred from regionally accredited institutions shall count toward a CSU baccalaureate degree. CCC and CSU courses already approved for Subarea B4 may retain that certification. Each CSU campus curriculum process will review and approve its own courses for Subarea B4 credit, and each CSU campus will decide the prerequisite appropriate for Subarea B4 courses.

Foundational and Baccalaureate Proficiencies

The recommended “foundational” and “baccalaureate” quantitative reasoning definitions were not adopted because they are not appropriate for GE policy. As specified in the executive summary of the QRTF report, the purpose of the task force was to “review the CSU’s expectations for student proficiency in quantitative reasoning upon high school and college graduation, and to recommend changes to existing policies and practices.” Student proficiencies upon high school graduation are addressed in CSU admission policy, not in GE policy. Similarly, GE policy does not address college graduation-level proficiencies.

Also in keeping with the plans laid out in that March 2017 letter, EO 1100 specifies that “satisfaction of CSU General Education (GE) Subarea B4 Mathematics/Quantitative Reasoning will fulfill the CSU

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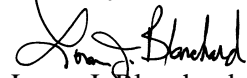
graduation requirements for quantitative reasoning, and students satisfactorily completing Area B4 will be deemed proficient in quantitative reasoning at the GE baccalaureate level.” However, through regular campus curricular procedures, a campus may mandate that a mathematics/quantitative reasoning course be taken to satisfy the upper-division Area B requirement. Additional mathematics or quantitative reasoning courses may be pursued in fulfillment of major or minor requirements or may be taken as electives. While the WASC Senior College and University Commission requires institutions to ensure development of five core competencies (written communication, oral communication, quantitative reasoning, and information literacy), each CSU campus is responsible for providing appropriate educational opportunities across the baccalaureate degree and for carrying out assessment of student learning. Writing or quantitative reasoning across the curriculum strategies may be adopted at the campus level, according to local curricular processes. CSU GE Breadth policy does not include foundational or baccalaureate proficiency requirements related to any discipline, including the five WASC core competencies.

Foundational Proficiency for Community College Transfer Students

We do not impose A-G admission requirements on community college students, who may be admitted to CCC campuses without having completed a high school education. We have a commitment to treating those students equitably, and the CCC has the responsibility of educating those students at a baccalaureate level prior to transfer. The CSU accepts baccalaureate-level transfer courses toward CSU degrees, as addressed in EO 167. For CCC students, the CSU proxy for A-G proficiency is satisfactory completion of the Golden Four basic skills courses in oral communication, written communication, quantitative reasoning and critical thinking GE Subareas. Satisfying these courses demonstrates that students have learned beyond the high school equivalent of A-G. No other discipline requires CCC transfer students to complete high-school level courses as a prerequisite to enrolling in GE courses.

I hope this clarifies the actions taken, as outlined in my March 2017 letter and as carried out in the drafting of EO 1100 Revised.

Sincerely,



Loren J. Blanchard, Ph.D.
Executive Vice Chancellor

c: Rebecca D. Eisen, Chair, CSU Board of Trustees
Lillian Kimbell, Chair, Educational Policy Committee
Timothy P. White, Chancellor