

## UC Board of Admissions and Relations with Schools (BOARS)

### Statement on Basic Math for All Admitted UC Students

July 2013

All students admitted to the University of California, whether as freshmen or as transfer students, must demonstrate a minimal level of mathematical competence. For freshman applicants, demonstration of this minimal level of competence entails successfully passing three high school courses that, according to Senate Regulation 424.3.c, “must include the topics covered in elementary and advanced algebra and two- and three-dimensional geometry.”<sup>1</sup> The Mathematics section of the online “A-G Guide”<sup>2</sup> makes explicit reference to both the Common Core State Standards for Mathematics<sup>3</sup> (CCSSM) and the Intersegmental Committee of Academic Senates (ICAS) “Statement on Competencies in Mathematics Expected of Entering College Students”.<sup>4</sup> The most recent version of the ICAS mathematical competency statement makes clear the close alignment between it and the CCSSM. Both define the mathematics that all students should study in order to be college ready.

The ICAS “Statement of Competencies in Mathematics Expected of Entering College Students” has been jointly developed and adopted by all three segments of public higher education in California. Given the agreement between the ICAS statement and the basic elements of the CCSSM for high school<sup>5</sup>, BOARS believes that the basic mathematics of the CCSSM can appropriately be used to define the minimal level of mathematical competence that all incoming UC students should demonstrate.

The Common Core State Standards were adopted by the state of California in 2010, and K-12 schools are in the process of adjusting their curriculum and teaching practices to begin implementing Common Core as of the 2014-15 school year. Similarly, California community colleges (CCCs) have not yet fully developed math sequences that are aligned with the CCSSM. Rather, most CCCs continue to recommend the traditional Elementary Algebra – Intermediate Algebra sequence for students who have not demonstrated competence in high school mathematics.

It is current UC policy is that any transferable math or statistics course that may count toward the quantitative reasoning breadth requirement must have Intermediate Algebra or its equivalent<sup>6</sup> as an explicit prerequisite. This prerequisite requirement allows Intermediate Algebra to serve as a proxy for the basic level of mathematical competence expected of all students attending UC.

---

<sup>1</sup> <http://senate.universityofcalifornia.edu/manual/rpart2.html#r424>

<sup>2</sup> <http://www.ucop.edu/aguide/a-g-requirements/c-mathematics/index.html>

<sup>3</sup> <http://www.corestandards.org/Math>

<sup>4</sup> <http://icas-ca.org/competencies-in-mathematics>

<sup>5</sup> The CCSSM states that “The high school standards specify the mathematics that all students should study in order to be college and career ready. Additional mathematics that students should learn in order to take advanced courses such as calculus, advanced statistics, or discrete mathematics is indicated by (+).” The phrases “basic mathematics” and “college-ready content standards” in this document refers to those content standards that are not indicated by a (+).

<sup>6</sup> [http://info.assist.org/pdf/assist/2012\\_uc\\_tca\\_letter.pdf](http://info.assist.org/pdf/assist/2012_uc_tca_letter.pdf)

Specifying that transferable courses must have at least Intermediate Algebra as a prerequisite is not fully consistent with the use of the basic mathematics of the CCSSM as a measure of college readiness in that most existing Intermediate Algebra courses contain topics that are identified in the CCSSM as part of the (+) standards. Because current course offerings of Intermediate Algebra include material identified in the CCSSM as “additional mathematics that students should learn in order to take advanced courses such as calculus, advanced statistics, or discrete mathematics,” it will not be appropriate in the future to use traditional Intermediate Algebra (i.e., Intermediate Algebras as defined prior to CCSSM implementation) as the primary standard for demonstrating the minimal level of mathematical competence that BOARS seeks in students admitted to UC. Requiring that all prospective transfer students pass the current version of Intermediate Algebra would be asking more of them than UC will ask of students entering as freshmen who have completed CCSSM-aligned high school math courses. As such, BOARS expects that the Transferable Course Agreement Guidelines will be rewritten to clarify that the prerequisite mathematics for transferable courses should align with the college-ready content standards of the CCSSM.