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April 7, 2014

The Honorable Carol Liu  
Chair, Senate Education Committee  
State Capitol, Room 2083  
Sacramento, CA 95814

**Re: SB 1200 (Padilla), as Amended on April 2, 2014**  
***Scheduled to be heard by the Senate Education Committee on April 9, 2014***  
***Position: CONCERN***

Dear Senator Liu:

On behalf of the University of California (UC), I am writing to express our concerns regarding SB 1200 (Padilla), which calls upon UC to develop guidelines for high school computer science courses that would satisfy the mathematics prerequisite for UC admission. We believe this measure could lead students to assume that any computer science course could meet the mathematics requirements and steer them away from taking fundamental Common Core math courses, which provide the requisite academic preparation to succeed at UC.

First, I would like to clarify UC's relationship with our high school partners when it comes to developing course standards. The State Board of Education (SBE) is responsible for developing guidelines for high school courses. What UC has done in recent years, acting through its Board of Admissions and Relations with Schools (BOARS), is to work with the standards the SBE adopts, and then we amplify what is necessary for courses to be approved to fulfill the various requirements outlined in the "a-g" curriculum that students must complete to be eligible for UC admission.

Secondly, I want to explain the rationale underlying UC's mathematics prerequisite, commonly known as subject area "c." UC requires students to complete three years of college preparatory mathematics coursework – generally understood to consist of elementary algebra, geometry, and advanced algebra – to be eligible for admission. Students are further encouraged to take a fourth year of mathematics to make themselves more competitive. This course sequence will ensure that students have the quantitative skills they will need to succeed at UC, regardless of their intended major. Under current BOARS rules, computer science

courses that deepen students' understanding of mathematics can and do count as advanced computer science courses in area "c." However, most high school computer science courses are counted as general college preparatory electives (area "g") for purposes of UC admission because they do not have sufficient math content.

We are concerned that SB 1200 will lead students to assume – incorrectly – that *any* computer science course provides adequate preparation for college-level mathematics. While it is conceivable that an advanced-level computer science course could be designed to incorporate sufficient mathematics, such courses are not commonly offered. Moreover, while some highly prepared students may benefit from taking advanced-level computer science courses in high school, this is not the norm. We believe the bulk of students will be better served by taking Common Core State Standards math courses to fulfill the area "c" prerequisite, and we are concerned by legislation that might shift resources away from that goal.

UC is willing to develop guidelines for advanced level computer science courses that incorporate substantial exploration of mathematical concepts and are of sufficient rigor to prepare students for college-level work. However, these courses will serve as a supplement to – rather than a substitute for – the three years of mathematics that serve as the cornerstone of the area "c" requirement. We believe it is critical to support full implementation of the Common Core State Standards for mathematics' in high schools and as a basic part of a college preparatory education. This means three years of the Common Core State Standards math for a student before going on to other topics, be they computer science, discrete math, statistics or pre-calculus.

As noted previously, we are concerned that SB 1200 does not preserve the integrity of UC's admissions requirements by ensuring that students have an adequate foundation in core math skills (elementary algebra, geometry, and advanced algebra) prior to taking a computer science course for subject area "c" credit. In addition, the bill does not take into consideration BOARS' efforts to align the "a-g" curriculum requirements with Common Core – and indeed, with the national emphasis on helping high schools implement the Common Core Standards, which are meant to define the minimum standards for college and career readiness.

Finally, SB 1200 includes a statutory description of the "a-g" subject area requirements, which we believe to be inappropriate. UC's "a-g" requirements are established by faculty to ensure that students have the necessary academic preparation to succeed at UC. Admissions requirements are within the purview of the faculty and are subject to change by future actions of the UC Academic Senate.

We welcome your interest in ensuring that California's high school students have access to the benefits of a well-rounded college preparatory curriculum, and we look forward to working with you and the author to address the concerns we have identified with SB 1200.

Should you have any questions about the University's position on this bill, please do not hesitate to contact me at (916) 455-9924.

Sincerely,

A handwritten signature in black ink, appearing to read "Nadia Leal-Carrillo". The signature is fluid and cursive, with the first name "Nadia" being the most prominent part.

Nadia Leal-Carrillo  
Legislative Director

cc: Senator Padilla  
Members, Senate Education Committee  
President Janet Napolitano  
Provost and Executive Vice President Aimée Dorr  
Executive Vice President Nathan Brostrom  
Senior Vice President Daniel Dooley  
Associate Vice President and Director Steve Juarez