University of California   **Academic Senate**

Board of Admissions and Relations with Schools

Minutes of Meeting

July 17, 2023

I.   **Area C Concerns**

Chair Knowlton framed today's discussion as focusing the working group charge on 1) how to implement the July 7 resolution or perhaps refine it to address "program" courses, 2) how to incorporate Algebra II as a prerequisite and clarify the criteria for validation thereof, and 3) how to grandfather students already in the pipeline. Focusing on specific, named courses would not set good policy-making precedent. BOARS will appoint the working group members, with the assistance of the University Committee on Committees (UCOC), to ensure objectivity and balance. Heightened external and internal scrutiny underscores the need for careful committee composition as well as transparent review and disposition of their product. Established Senate review procedures will be followed.

Not all members are convinced that standard Senate review procedures are sufficient, at least in this instance. The one-week turnaround for public comment on important statewide guidelines for math instruction added urgency to calls for BOARS' July 7 action (which was submitted to and may have influenced the State Board of Education decision on the matter).

UCOP's ability to search for courses that do not meet an unrevised definition of advanced math is limited in the absence of updated content criteria; UCOP is further hampered by the lack of an independent definition of data science as a field. As a result, implementation of the July 7 motion would rely upon a key-word search, not a content analysis. At least one member repeatedly suggested that UCOP has misinterpreted/misapplied the advanced math standard for years – and absent correction, will continue to do so – and so review of all current courses potentially implicated is needed. UCOP consultants noted that language in the Senate Regulations is deliberately broad so as to be inclusive, and that changes are up to the Senate. Accordingly, the validity of sample syllabi vis-à-vis the July 7 motion remains unclear. Members' independent research suggests insufficient algebra content in specifically impugned courses, as well as data science courses in general, regardless of course name. How prerequisites are assessed in the UCOP content evaluation is unclear. New technology could help UCOP reevaluate "program" courses for their content, however, just how quickly UCOP can reevaluate a potentially large number of courses is unclear, especially if standards are simultaneously under discussion.

Public clarification of BOARS' current position and how it was reached was suggested. The objectivity of certain downstream reviewers was also questioned by at least one member. Council Chair Cochran noted that Senate deliberations are best conducted in-house, and that public actions have multiple and cascading consequences, not all of which can be foreseen, especially if action is taken hastily or without broad consultation. How to clarify BOARS' expectations prior to reevaluation of advanced math standards by a working group is not clear.

The proliferation of data science-type courses is presented differently; UCOP notes that ~400 data science courses versus ~34,000 overall area C courses are articulated, while concerned members suggest the recent growth in impugned data science courses has increased significantly since BOARS' 2020 action. The current course completion pattern of students who list data science on their transcripts seems clearer, as UCOP notes that of the ~250,000 applications last fall, fewer than 500 listed data science absent an Algebra II-type course.

Members are also encouraged to consider long-term and political considerations that may arise when potential recommendations are reviewed by other audiences, some of which have the authority to reject or alter BOARS' and subject-matter experts' recommendations, yet none of whom are subject-matter experts themselves. The role of BOARS in Shared Governance does not exist in a vacuum. While Senate leadership counsels politic public communications, some members perceive a conspiracy to silence the committee or to misrepresent its position. The persuasiveness of academic arguments in a political forum is unclear.

➢ By a vote of 9-1-0, BOARS adopted this statement:

Following the unanimous BOARS 7/7/23 decision, and reaffirming long-standing policy (Senate Regulations 424 and 428), data science courses currently approved in the Statistics or Other Advanced Math category no longer validate or substitute for Algebra II. This further motion is to make clear that exceptions can be made for courses that have as a prerequisite mastery of Algebra II content. High school students who took data science courses in academic years 2022-2023 or 2023-2024, under the guidance that these courses validated Algebra II, are exempted from the Area C advanced algebra requirement.

The charge and membership for the working group will continue to be developed with the input of members, divisions, and UCOC. Normal Senate review procedures include: a work group report to BOARS, a BOARS report to Council, systemwide review, a Council report to the Academic Assembly, and then evaluation by the administration followed by possible consideration by the Regents. Work group membership must be carefully considered to avoid even the appearance of conflict of interest, from any perspective. Timely action under Senate protocols could prove challenging.

Adjournment 1:45 pm.

Minutes prepared by Kenneth Feer, Principal Analyst

Attest: Barbara Knowlton, Chair

Attendance:

Barbara Knowlton, Chair

Sophie Volpp, UCB

Jay Stachowicz, UCD

Sergio Gago-Masague, UCI

Rob Watson, UCLA

Pete Sadler, UCR

Akos Rona-Tas, UCSD

Josh Berke, UCSF

Greg Mitchell, UCSB

Laura Giuliano, UCSC