November 1, 2017

TO: Dylan Rodríguez, Chair
Riverside Division

FR: Thomas Stahovich, Chair
Executive Committee, Bourns College of Engineering

RE: Proposal for the Implementation of a Gender Studies Breadth Requirement at UCR

On 26 October 2017, the executive committee of Bourns College of Engineering reviewed the “Proposal for the Implementation of a Gender Studies Breadth Requirement at UCR.” While the Committee is strongly supportive of this change in breadth requirements, the Committee is concerned that it may increase the number of units BCOE students must complete to graduate. As Engineering majors already have heavy unit requirements, an increase in units is problematic. More concerning, the proposal may also lead to an increase in the time to graduation for BCOE students. These concerns are grounded in the following analysis:

**BCOE students would have a limited selection of courses:**

In the proposal, the feasibility of the Gender and Sexuality Studies Breadth Requirement (GSSBR) is based on the availability of over “200 classes offered by the University of California, Riverside, that meet” the GSSBR requirements. However, the actual number of courses available to BCOE students is vastly smaller. First, of the over 200 classes, only 108 are unique – the rest are cross-listed versions of these. Second, of the 108, only 22 are approved for the BCOE breadth requirements, and of these, only 18 are upper division courses that could be used to satisfy the BCOE “Depth requirement” (see below). Because only a small number of GSSBR courses satisfy BCOE requirements, the GSSBR could result in an increase in overall units and delay of graduation for BCOE students.
The GSSBR courses would satisfy a limited subset of the BCOE breadth requirements:

The proposal states that BCOE Students could satisfy the GSSBR by choosing an appropriate course to satisfy one of the existing six breadth requirements. However, the proposed courses for the GSSBR have restricted application to these six requirements.

BCOE students are required to take six breadth courses in the following areas:

- **Hum-A** Humanities A: One course in World History
- **Hum-B** Humanities B: One course in Fine Arts, Literature, Philosophy or Religious Studies
- **Hum-C** Humanities C: One course in Human Perspectives on Science & Technology
- **SS-A** Social Sciences A: One course in Economics or Political Science
- **SS-B** Social Sciences B: One course in Anthropology, Psychology or Sociology
- **SS-C** Social Sciences C: One course from General Social Science (SS-C) or from SS-A or SS-B

The courses used to complete these six requirements may not overlap one another. Additionally, students must also complete one course in Ethnicity and two upper division breadth courses, which may overlap with the courses used to satisfy the six humanities/social sciences requirements. The two upper division courses comprise the College’s “Depth requirement.”

Of the 22 proposed GSSBR courses that are approved for BCOE students, none satisfy the Humanities A or C requirements, and only six satisfy the Humanities B requirement. Similarly, only one course satisfies the Social Sciences A requirement, while eleven satisfy the Social Sciences B requirement and 15 satisfy the Social Sciences C requirement. Thus, the proposed GSSBR has only limited overlap with the existing BCOE breadth requirements and may result in an increase in overall units and delay of graduation for BCOE students.

BCOE’s breadth requirements are constrained both by campus requirements and by accreditation:

As with all colleges at UCR, BCOE’s breadth requirements are constrained by senate bylaws. In addition, engineering programs must be accredited by ABET, which places additional constraints on the breadth requirements. More specifically, ABET requires that all engineering program include “a general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.” BCOEs breadth requirements are designed to satisfy ABET requirements.

Prerequisite Requirements

Seven of the 22 proposed GSSBR courses that are approved for BCOE students have perquisite course requirements. Thus, satisfying the proposed GSSBR may require BCOE students to take prerequisite courses that may or may not satisfy other breadth requirements. Two of the 22 courses have numerous prerequisites --- SOC 141 has three, and PSYC 171 has five --- including prerequisites that are not
approved for BCOE students. Thus, because of prerequisite requirements, satisfying the proposed GSSBR may result in an increase in overall units and a delay in graduation.

Constrained Schedule:
BCOE students have highly constrained curricula and must take major-specific courses in a prescribed sequence. Each BCOE major has a course plan prescribing the courses to be taken each quarter. Deviations from the course plan typically result in an increased time to graduation by at least one year. To satisfy the current breadth requirements, BCOE students must find approved courses during quarters prescribed by the course plan and at times that do not conflict with major-specific courses. Because of scheduling constraints and course enrollment limits in breadth courses, BCOE students already have difficulty satisfying the current breadth requirements. The addition of the GSSBR will increase the complexity of scheduling and may result in an increase in overall units and a delay in graduation.

Course Availability:
While the proposal provides no data about the frequency with which GSSBR courses are offered, it is likely that some may not be offered frequently. This could increase the difficulty for BCOE students to satisfy the GSSBR, which might contribute to an increase in overall units and a delay in graduation.

Conclusion:
The proposal for the GSSBR is based on an analysis suggesting that the “requirement would not extend students’ length of time to graduation.” However, the Committee’s analysis of the proposal suggests that the new requirement may in fact (a) increase the number of units BCOE students must complete to graduate and (b) increase the time to graduation for BCOE students. The Committee’s analysis is based on a variety of factors not considered in the proposal. Thus, while the BCOE Executive Committee is strongly supportive of the goals of the GSSBR, the committee requests that proposal be modified as necessary to ensure that there is no increase in units or time to graduation for BCOE students.