November 3, 2016

TO: Abigail Richards, Chair, Curriculum and Programs Committee

FROM: Franke Wilmer, APWG Chair and Faculty Senate Chair-elect, and Working Group Members Professors Meta Newhouse, Brett Walker, Bill Brown, and Scott Myers

RE: Report of APWG on Political Science Curriculum revision and Proposal For a BA in Computer Science

Proposed Revision of Political Science BA
The Academic Programs Working Group met November 3, 2016 for just over an hour. They discussed and recommended approval of the revised Political Science curriculum, noting that the process of revision had been thorough, thoughtful, and diverse utilized resources of program assessment including an external review and a study involving curriculum feedback from Political Science alumni. The faculty of the department also met to consider the information obtained from the report and survey and recommend to the whole faculty that they engage in a day-long curriculum assessment and revision process.

The proposed revision was the outcome of this process. It eliminates four subfield options, adds an introductory course on political theory to the foundational course requirements, introduces concepts of research methods and exposure to disciplinary scope at a foundational level, and links these skills and knowledge base to an applied research experience in the capstone. The proposal also renumbers an existing course as a junior-level course for which the five foundational courses are prerequisites in the sense that they must all be completed before students can proceed to the upper-level courses.

The APWG unanimously recommended approval, noting that the revision would make better use of faculty resources, did not reduce the number of student credit hours and courses available to students, and provided more flexibility for students to develop concentrations with the discipline that reflect their own professional and career interests and goals.

Proposed BA in Computer Science
The Working Group then considered the proposed Bachelor of Arts in Computer Science. Members were in complete agreement that (1) the objectives identified in the proposed have tremendous and intrinsic merit; (2) the proposed degree seems consistent with national trends
in both academy and the job market toward interdisciplinary degrees as well as demands of incoming students; (3) the proposed program holds great promise for diversifying the student body of engineering majors generally and Computer Science majors specifically. All members of the Working Group liked the idea of this degree.

The Working Group, however, also expressed major concerns about the program proposal in its current form. These concerns include, foremost, a lack of correspondence between the objectives of the degree and the proposed coursework to fulfill those objectives. Specifically, for example, critical thinking and decision making, participating as citizens in a world society, writing and speaking “with elegance and insight,” understanding what “a life worth living” means, and drawing more complex connections between subjects (presumably computer science and the field of the “minor and enhancement” credits) are all laudable goals. But these will not necessarily be achieved by “adding a minor and stirring” it up with a modified (reduced requirement) version of the Computer Science major.

The proposal was also unclear about the intellectual differences that distinguish among the fields of the humanities, arts, and social sciences (sometimes informally referred to as “sides of the campus”). The objectives described (above) can be achieved individually through a smaller menu of courses from within the disciplines within these fields, but most often not by fulfilling the minor requirements alone for any one of the disciplines within the three fields.

The Working Group discussed various ways this might be remedied, but not for the purpose of making specific recommendations. These remedies might inspire program proposers to rethink, reconfigure, and consult more broadly across the fields in order to resolve the intellectual deficiency noted by all committee members, that is, the lack of correspondence between the objectives and the courses that could fulfill them. For example, thinking in terms of the differences among the humanities, arts, and social sciences, could generate three versions of the objectives that would make a better fit with the intellectual skills and knowledge bases that characterize the fields. A computer science major combined with a humanities discipline like philosophy would fulfill one set of objects, while, alternatively, combined with a social science discipline, or art discipline would fulfill different sets of objectives.

Another idea that each member of the group favored was the creation of a very specific set of courses (or menu of courses) corresponding to each objective without regard for whether any one rubric would include enough credits to constitute a minor. This would be a very interdisciplinary set of courses combined with the modified/reduced computer science requirements to reflect the objectives identified in the proposal. One menu of courses would enable students to better understand and acquire the skills to be more effective world citizens (advanced modern language courses, some international political science courses, some regional or world history courses, for instance). Another menu would cultivate skills of critical thinking (philosophy, history of science, political theory, textual analysis) and so on. One committee member noted that this model seems to be the one reflected by more of the existing similar programs in other universities like those listed in the proposal.
All members agreed that two structural problems need to be addressed. One is that rather than a modified/reduced computer science major, to which a minor in any discipline in the humanities, arts, or social sciences is added, plus intermediate level competency in a foreign language, this should really be a modified double major. Design is not offered as a minor and requires somewhere are 60 credits to complete the requirements of the major. But Design is also a field of study that makes an appealing fit with the proposed BA combining Computer Science with an Arts discipline and, the committee believed, would be attractive to students. It simply cannot be done as a minor.

Similarly, other humanities and social science disciplines do not assess minors or the achievement of outcomes by minors and the minor course menus in particular disciplines do not of themselves automatically fulfill the objectives identified in the proposal. Noting that the computer science courses constitute roughly 40 credits, and the “broadening” or “minor” course another 40 credits, with 30-32 credits for core courses, it would take some planning and modification, but a double major curriculum is the only way, members left, that the objectives of the proposal could be achieved. Students in this program, for example, might be allowed to count as university core courses taken to fulfill the requirements of the two majors.

The second structural problem lies with the capstone and assessment of the objectives as an outcome of interdisciplinary integration. To be meaningful, students must be assessed not only in each field, (which they would not be under the proposal for a “minor”) but also for their success in integrating the two, and in so doing, achieving the objectives identified in the proposal. The proposal describes a “BS” style capstone while the Working Group unanimously agreed that it would have to be a BA-style capstone in order to reflect and allow assessment of the achievement of its objectives.

Finally, the group considered questions related to resources. If the program is a double major (modified) then two departments can work out a formula for fair resource allocation. Other models make this more difficult. Some majors are already so overloaded (with 40-60 student caps in 400-level courses) that increasing demand for their courses could necessitate their instituting a “majors only” policy. This would be counterproductive to the goal of creating this hybrid degree.

The APWG unanimously recommends that the Curriculum Program Committee not approve the proposal as currently formulated and urges the proposers to continue working on the development of a program that will achieve its objectives, can be assessed as a BA and for students’ success in integrating across multiple disciplines with a foundation in computer science. Members of the APWG also hope this review is helpful to them in doing so.