

December 10, 2015

PROFESSOR PAUL K.L. YU, Provost
Revelle College

SUBJECT: Undergraduate Program Review for Revelle College

Dear Professor Yu,

The Undergraduate Council has discussed the Revelle College 2015 Undergraduate Program Review. The Council supports the findings and recommendations of the review subcommittee and appreciates the thoughtful and proactive response from the College. The Council's comments centered on the following:

Humanities. The Council is concerned about declining enrollment in Humanities 3, 4, and 5 and opined that it is not clear why this is the case. The Council recommends that the College explore why students are opting to fulfill this requirement at the community colleges and ways to encourage enrollment. In addition, the College may consider whether there are any additional course options at UCSD that could potentially fill the Humanities 3, 4, and 5 requirements.

Academic Dishonesty. At the Undergraduate Council meeting, members discussed the issue of academic dishonesty, which was mentioned at the program review site visit as an area of concern for TAs. The Council recommends that the College explore dedicating TAs strictly to the international student population as a way to hedge possible cases of academic dishonesty. We understand that this practice is already employed at some of the Colleges.

The Council will conduct its follow-up review of the College in Spring Quarter 2017. At that time, our goal is to learn about the College's progress in implementing the recommendations of the program review subcommittee and the Undergraduate Council. The Council extends its thanks to the College for its engagement in this process and we look forward to the continued discussion.

Sincerely,

Geoffrey Cook, Chair
Undergraduate Council

cc: R. Continetti
T. Javidi
R. Rodriguez
B. Sawrey
M. Sidney

**UNDERGRADUATE COUNCIL – UNDERGRADUATE PROGRAM REVIEW
REVELLE COLLEGE, Spring 2015**

Introduction

The hallmark of undergraduate education at UC San Diego is the college system, which works to create intellectual and social community, while also facilitating different pathways for students with differing interests and aspirations. Revelle College, which this year crossed the threshold of its 50th year, powerfully represents UC San Diego's original vision by embedding a rigorous liberal arts education within the broader framework of a world-class research university. Revelle realizes to the fullest extent the ideal of the "well-rounded" liberal arts student. College faculty are fiercely committed to the vision and standards of Revelle, and correlatively, even when expressing discerning criticisms of individual aspects of their Revelle experience, students appreciate the rigor and breadth of their college studies, and the respect that Revelle affiliation inspires among their peers.

Yet Revelle is also confronting pressures, arising with the changing context of higher education, that may grow over time. These include:

- 1) intensifying external pressure, as tuition rises, to demonstrate "return on investment" in all aspects of university study, a demand not easily reconciled with the longer-term outlook of liberal arts training;
- 2) increasing cultural, linguistic, and ethnic diversity of UCSD students, including sharply elevated numbers of international students. These changes may require increased flexibility to allow students to succeed in college and major requirements;
- 3) demands on students to complete their degrees on time or even early, which raises the temptation to focus on work in the major at the expense of general education;
- 4) changing conceptions of the building-blocks of American liberal education, which is generally becoming more global in focus.

This review was framed by the committee's awareness of the important values embodied by Revelle's past and present successes, as well as by the need to explore possible avenues for adaptation that would not jeopardize or betray these values. The reviewers were impressed by the quality of the college's leadership, the commitment of its faculty, the thoughtful consideration by its executive committee of the college's requirements and curriculum, and the articulate engagement of its students in the Revelle experience.

The committee does not recommend major changes of direction or reforms. It rather highlights areas for further consideration and offers a set of more limited suggestions, in the interest of the college's continuing to evolve and adapt in appropriate ways to UCSD's changing context and students. Key areas include: articulating more clearly in communication with prospective and current students the goals and values of the college and how their GE's relate to them; continuing to explore ways of helping students effectively navigate the college GE requirements; addressing the growing issues in writing instruction for international students and California students with variable levels of English-language writing preparation; ensuring succession and renewal in the

college leadership and associated faculty; and strengthening pedagogical training for graduate teaching assistants, particularly in relation to diversity, writing issues, and academic integrity.

Requirements: Overview

Revelle's rigorous program is based on the assumption that all graduates, irrespective of major, should have grounding in mathematics, the natural sciences, and the humanities in addition to proficiency in a second language. Students take a year long calculus sequence and a labor-intensive 5 quarter humanities sequence, both with letter-grade requirements. They are also required to take five courses in Natural Sciences, with 4 courses in Physical Science (from both Chemistry and Physics) and 1 course in Biology. In addition students must take two courses in the social sciences and one fine arts course for which they may choose the pass/no-pass option, and one course that meets the DEI requirement. (Students who enrolled before the DEI requirement was established are still required to take one of the approved "American Civilization" courses.) They must demonstrate proficiency in a language other than English by passage of an exam or through the completion of a third year college language course.

We met with seventeen students who had a few quibbles, but were overwhelmingly enthusiastic about the program as a whole. In fact, requirements met with little or no criticism.

Revelle's rigorous science and math requirements tend to be a draw for prospective STEM majors, but it is notable that over 25 percent of Revelle students major in the social sciences. It should also be pointed out that Revelle science majors range widely across the departments of Biology, Engineering, Physics, and Chemistry. In line with UC San Diego's founding vision, this committee recognizes that distinctive features of each college will attract somewhat different student populations. We see this as a positive attribute of undergraduate education on this campus.

Time to Degree

The committee looked carefully at the relationship between Revelle's requirements and the general campus problem of average time to degree. We found no significant relationship. Other factors are far more significant than college requirements in slowing the rate of graduation – UC San Diego's basic writing program, transfer student articulation issues, and requirements for some majors.

The Revelle faculty noted that the main bottleneck in time to degree was not at the stage of college-specific requirements, but rather at the stage of undergraduate major requirements. For example, Biology majors from Revelle have a comparable time to degree compared to Biology majors from all of the other colleges. Thus, at least in the case of Biology, the main issue is access to upper division courses and not lower division requirements that are specific to a given college. Thus, the general consensus was to keep the science requirement at five courses, but to add a degree of additional flexibility to the approved courses.

That said Revelle has made strategic decisions since the last review that should speed up time to degree, particularly for transfers. First and foremost, IGETC certified students are no longer subject to Revelle's language requirement. For some transfers this will mean a four-course reduction in requirements. Second, the language requirement for non-IGETC students has been reduced from four years of college instruction to three. Third, Revelle has eliminated the area-of-concentration requirement for all students.

Revelle Humanities

The linchpin of Revelle College is the five-quarter humanities sequence – constituted by interdisciplinary, chronologically organized courses that extend from antiquity through the 19th century. It draws on faculty and graduate TAs from the Departments of History, Literature, and Philosophy. At a time when many humanities scholars are exploring global interconnections and non-western traditions, the approach of Revelle Humanities may appear somewhat antiquated. The program’s director, Steven Cox, answered our questions by pointing out that students get a deep grounding in *one* tradition and are encouraged to take elective courses in others. Although one might argue that a global approaches have reframed the ways in which many scholars now think about the “western tradition” we concur with Professor Cox’s observation that no single general education sequence can do everything. We also observe that general education surveys may equally be subject to the danger of becoming disconnected “grab-bags” of texts for students still seeking their intellectual bearings. One of the great advantages of Revelle Humanities is that students have an opportunity to read and discuss historically related texts in some depth. The notion of a “western tradition” helps to give some coherence to this ambitious project.

Overall the committee’s impressions of Revelle Humanities echo the enthusiastic endorsement of the last review. We too recognize that Professor Cox’s leadership is central to the success of the program as a whole. TAs sang the praises of his pedagogy seminar, which new TA’s must take in the fall quarter before Hum 1 begins. They gained confidence by analyzing assigned texts before having to teach them, and welcomed the opportunity to discuss pedagogical techniques, writing instruction, and grading before meeting students in the classroom. They also appreciated being paid during the quarter in which they take the seminar. They talked about feeling respected by Professor Cox and by the college. And several of them have turned to him and other Revelle faculty for career advising. Clearly, the energy and resources that go into TA instruction translate directly into high-quality undergraduate education while significantly enhancing the professional training and experience of the assisting graduate students as well.

Several TAs expressed frustration and concern about the extent of academic dishonesty. This appears to be a campus-wide problem shared by the colleges. We have no detailed recommendations on how Revelle might address the issue, except to say that more discussion of academic integrity should be included in the fall pedagogy seminar to prepare the TAs for effective deterrence of cheating and plagiarism in their sections and also that - as research on the issue shows – explicit, consistent addressing of academic integrity with students in the classroom is likely to reduce incidents of dishonesty. Given the mission of the colleges to socialize students to the academic culture and ethical standards of UCSD, the Revelle leadership, instructors, and advisers should continue to discuss how to cultivate a strong undergraduate culture of academic integrity that will extend beyond the college.

The students with whom we met were lively, enthusiastic, articulate, and argumentative in the best sense. Much of our conversation revolved around the humanities sequence. One student impressed the committee by complaining that one of his humanities professors was “sophistic” – a term that he apparently learned in class. He exemplified the sort of critical thinking that humanities education is supposed to generate. For the most part, students were enthusiastic about their experience. One of the transfers said that she regretted not being able to take more than one of the humanities courses. Students regarded the sequence as rigorous, and clearly took pride in their accomplishment.

The only course evaluations we were able to see were summaries of CAPE reviews going back several years. Over all, the evaluations were very good, although there was considerable variation

depending on the professor. We also saw some improvement in the reviews as the sequence progressed. This reading echoes those students who pointed out that their appreciation of the humanities courses grew over time. HUM 1 and 2 are writing- and labor intensive courses, so it is not particularly surprising that they generate resistance particularly among students who are oriented to math and science.

In general, grade distribution is balanced despite some inevitable variation among professors.

Enrollment Decline: HUM 3, 4, 5

Provost Yu and others expressed concern that enrollment drops precipitously after HUM 2, with as many as fifty percent of students opting out. For example in Winter 2014, 929 students were enrolled in HUM 1 while only 362 were enrolled in HUM 4. Many students take HUM 3, 4, and/or 5 during the summer in an articulated community college course. The material presented to the committee did not specify whether students typically opt out of one or two courses.

The 2008 Program Review Committee gave thoughtful attention to this issue, which it identified as a serious problem. Several observations contained in that report bear repeating. First, the “second year crunch” (including organic chemistry) confronted by many science majors works against HUM 3,4,5. Second, some students seem to be choosing the summer course option in order to raise their GPAs. 3) The committee questioned whether the college would be able to accommodate students in HUM 3,4,5 if enrollments grew significantly.

This committee had a somewhat different view of the matter. We were most struck by the fact that students who opt out of HUM 3, 4, or 5 are pushed to take community college courses rather than courses offered at UCSD in the Departments of History, Literature, or Philosophy. Revelle faculty and staff pointed out that community college courses duplicate material covered in the Revelle sequence, but that did not strike us as a compelling argument. The humanities sequence is not analogous to Calculus 1, 2, 3, which convey a widely agreed upon body of knowledge for which students may be held accountable. The greatest value of Revelle Humanities lies not in the specific content that it covers, but rather in the fact that it gives students an opportunity to study important, conceptually complex texts sequentially in a context that encourages discussion, critical thinking, and intellectual community. Engaged students gain a sense of the foreignness of the past while also relating big ideas to their own lives. This is not to diminish the carefully considered content of HUM 3, 4, and 5. To have created a coherent curriculum that has worked so well over many years is a substantial achievement. In this case, however, we think that that the tail may be wagging the dog. We concede that it would be desirable for more students to complete the sequence in-house, but given the persistence of the drop-off, we see no reason to privilege Community College courses, however closely they may duplicate HUM content. In fact, it might make sense to cut back on community college options while increasing options in-house. There are a number of courses offered in the Humanities departments that could build on the strong foundation provided by HUM 1 and 2. That option should be available to students who, for one reason or another, need or want to opt out of HUM 3, 4, or 5. Over all, upper division UC San Diego courses are likely to be more challenging than Community College courses while also offering a more stimulating intellectual experience.

Nor do we think that the opportunity to take an upper division history, literature, or philosophy course at UCSD would woo students away from HUM 3, 4, or 5, particularly if concern about GPA is the primary motivation. Most students appreciate the humanities sequence, particularly the second year courses, and if their choice is between the familiar sequence and a less familiar upper division course, most will probably choose the former. If Revelle were to reduce the number of articulated

community college summer courses, while offering a list of UCSD approved courses, we believe that students would be well served.

We realize that there may be some resistance to this proposal and we suggest that the college address the following questions: What do students who opt out of HUM 3, 4, 5, say about their motivations? Is the drop-off rate for Revelle Humanities comparable to the drop off rate for Roosevelt College's "Making of the Modern World"? Do students who take the full 5-course sequence feel demoralized by the decline in enrollments? (This committee found no evidence of this potential problem.) Answers to these questions would make it easier to determine what the problem is and how to address it.

Natural Science Requirements

Consistent with the overall enthusiasm for other aspects of the Revelle curriculum, there was broad support within the college for maintaining a strong science curriculum. In particular, the faculty emphasized the importance of these courses for developing a broad understanding in Chemistry, Physics and Biology that would provide a solid foundation for more advanced studies in the sciences. However, the faculty/staff/students all expressed some enthusiasm about adding more flexibility to the curriculum. The reasons for this varied, but the three most salient issues were time to degree, a desire to take newly developed courses that were not offered when Revelle was founded, and an interest in offering a program more welcoming to non-science majors. For example, classes are now offered by SIO in the earth sciences, and UCSD has significantly expanded offerings in public health over the last several years. While some of these courses were not considered as rigorous as the classic Chemistry/Physics courses, many argued that they were highly relevant in today's academic and economic climates.

Thus, our overall impression is that two goals should be considered:

- 1) The need to balance concerns about course load and TTD against the risk of closing the door to gateway courses for many of the sciences.
- 2) The need to balance analytic rigor against the benefits of offering courses that are potentially more descriptive but that are more immediately relevant to many students.

Given these considerations, our impression is that increasing the flexibility of the accepted courses, without decreasing the overall number of required courses, would provide a means of achieving both goals.

Adding flexibility would positively impact TTD by increasing available course offerings, and it would simultaneously allow students to gain exposure to newer and more immediately relevant courses in areas such as the earth sciences. One potential course of action would be to replace one chemistry or physics course with one alternative selected from outside the traditional curriculum. This would preserve the focus on rigor in the sciences, but would still increase student's options and their breadth of knowledge.

Calculus Requirement

Calculus provides students with a common core of basic knowledge that is essential as a gateway to gaining deeper knowledge in all of the sciences and, increasingly, in the social sciences. In psychology, for example, it is foundational to much current research. Calculus also gives students the opportunity to open doors that would otherwise be permanently closed. Students who lack basic knowledge of calculus– and evidence of that knowledge in the form of graded courses – will

not be able to pursue degrees in the physical and biological sciences and in many branches of the social sciences.

The committee discussed a proposal to allow prospective humanities majors the option of taking calculus on a pass/no pass basis, but there were several objections: 1) Without a grade, students would be less likely to put in the necessary effort and might be more likely to fail. 2) Many students change their major. For some of those students, the pass/no pass option would foreclose opportunities.

Rather than recommending the pass/no pass option, the committee recommends that Revelle be very clear in letting prospective students know about its calculus and science requirements. Transparency and advance communication will spare some students, not to mention the advising staff, an unnecessary burden.

Language Requirement

Although global interconnections are more apparent now than ever before, Revelle and Eleanor Roosevelt are the only colleges at UC San Diego that require proficiency in a second language. As mentioned above, Revelle has made a significant compromise in its language requirement, while remaining committed to the principle that competency in a second language is both intellectually enriching and, in many cases, professionally useful. The committee strongly supports Revelle not only in its flexibility, but also in its continuing commitment to second language proficiency.

Social Science Requirement

Currently Revelle students are required to take two lower division social science courses. The committee supports that requirement but suggests that upper division courses be permitted, subject to departmental prerequisites. Given the extent of Revelle requirements, the committee thinks that students should be allowed greater choice in this area. There doesn't seem to be a clear rationale for the lower division restriction.

Advising

Revelle employs eight advisers for nearly 4,000 students. (In 2008, when enrollments were closer to 3,700, the staff consisted of nine people.) Although the workload is daunting, the group with whom we met was remarkably uncomplaining. Advisers are focused on giving timely attention to students, and they spoke highly of a peer advising system that was put into place since the last review. The committee was impressed by the new online system that allows students and advisers to visualize four-year plans. Apparently the system will improve soon with the addition of a new add/drop feature. The staff was also very supportive of the new pathway for IGETC students.

Revelle also provides regular opportunities for students to interact informally with college faculty.

International Students

Revelle and the other colleges are at the front line in the university's effort to integrate international students. This has been a difficult and at times frustrating task as advisers and administrators, as well as teaching assistants, seek to work through cultural differences and uneven preparation particularly for the humanities courses. There is hope that the planned summer bridge program will provide the foundation that many students sorely need. Overdue changes in the basic writing program should also help to ease the path for international students along with others.

In the course of conversations the committee heard another proposal that merits further consideration, namely allowing ESL students to take English to fulfill Revelle's language requirement. The committee endorses that proposal.

Conclusions

If UCSD is truly a "student centered, research focused, service oriented, public institution" as the new slogan suggests, Revelle College should be treasured and supported. It is remarkable that a college devoted to a broad and demanding liberal arts education continues to thrive in the midst of multiple countervailing pressures. Overall, this committee is in agreement with the last review which concluded that Revelle was generally "in good health, well-administered and well-led." Eventually, with the addition of new faculty, it seems likely that the humanities sequence will move in a more global direction, but we see no reason to force what should be an organic, considered evolution of its curriculum. We are recommending some tweaks to the program that will smooth the pathway for some students, while giving them more choices. Although we found no evidence that Revelle's requirements stand as a significant obstacle in the way of timely graduation, several of our recommendations are consistent with wider efforts to speed up the average time to degree.

1. Administrators and faculty might do more to help students understand the value of college requirements. Students took pride in the rigor of the program, but they didn't seem to understand the broader value of the Revelle plan even though many of them provided living examples of what the program seeks to achieve – critical thinking, confidence, engagement with big questions, and intellectual community. The administration of the college might also provide students with information on the more instrumental benefits of clear writing and critical thinking for a multiplicity of professions, including engineering.
2. We agree with faculty, students, and administrators who suggest that the science requirement be amended to allow students to take one "non-traditional" science course in lieu of one of the chemistry or physics courses.
3. Allow students to fulfill the Social Science requirement with upper division as well as lower division courses, subject to departmental prerequisites.
4. Allow students who want to opt out of HUM 3, 4, or 5 to substitute one upper division course offered by History, Literature, or Philosophy. At the same time, consider the possibility of reducing Community College alternatives.
5. Explore the possibility of allowing international students to take English to fulfill the college language requirement.
6. Revelle will face a significant challenge when Professor Cox decides to retire, and for the sake of the college we hope that we are being premature in mentioning the issue. We think that the success of the humanities sequence derives in great part from the strength of faculty leadership and the full integration of writing instruction with course content, as exemplified by Professor Cox's pedagogy seminar. As Revelle moves forward we hope that it will remain committed to the maintenance of this fully integrated approach.

Review Committee

Professor and Program Review Chair Rachel Klein, Department of History, UC San Diego

Professor John Serences, Department of Psychology, UC San Diego

Professor Tyrus Miller, Department of Literature and Vice Provost and Dean of Graduate Studies, UC Santa Cruz