Report of the Task Force on General Education

October 14, 2016

Table of Contents

ntroduction	

1. Refine the list of existing courses to highlight those that are truly introductory and appropriate for the aims and goals of general education. Foster the development of courses that highlight innovative pedagogies and that explore social problems in collaborative, interdisciplinary ways.

2. Require foreign language instruction for all A.B. students, regardless of existing proficiency.

3. Require all students to take at least one course with international content and one course that explores the intersections of culture, identity, and power. These "tags" would co-exist with existing general education distribution areas.

4. Emphasize the connection between discipline-specific epistemology and the process of research by encouraging departments to create discipline-specific, writing-intensive methods seminars to be taken for credit in the junior year.

5. Reform the academic calendar to create space for a three-week January term.

6. Offer A.B. students increased flexibility in choosing which areas to emphasize as they select their distribution courses.

Appendices

A.	Detailed Proposal for a January Term	.15
B.	General Education in the Context of Princeton's History	.18
C.	Peer Institution Data	.22
D.	Internal Data	.31
E.	Calendar Survey Data Summary	.36
F.	Task Force Members and Charge	.43

INTRODUCTION

The General Education Task Force was charged with re-examining Princeton's general education requirements for undergraduate students. The requirements are intended to serve several interrelated and overlapping objectives, most importantly to introduce students to the modes of thinking and inquiry that characterize different approaches to scholarly exploration. In this way, the requirements help ensure that students explore multiple fields before they choose a concentration, and that they acquire exposure to and meaningful engagement with disciplinary areas outside of their chosen specialization. Through the campus-wide strategic planning process, our task force was charged with reconsidering how well our existing requirements serve these overlapping goals, particularly within the changing landscape of higher education.

We met regularly during the 2015-2016 academic year and heard from various stakeholders about their perspectives on general education. Our guests included representatives from the School of Engineering and Applied Science, the residential colleges, the Princeton Writing Program, the Office of International Affairs and Operations, the Council for International Teaching and Research, the Princeton Institute for International and Regional Studies, and the Office of International Programs. We also hosted four student focus group meetings and invited presentations from particular student groups, such as the Black Justice League, the Open Campus Coalition, and representatives of Princeton Latinx students. We took care to hear, when possible, from other campus partners who had recently concluded strategic planning studies, such as the Regional Studies Task Force and the Service and Civic Engagement Steering Committee. Finally, to intentionally ground our efforts in a larger framework, we formed three subcommittees: one to look "backwards" at Princeton's history in general education; another to look "outwards" at our peer institutions; and a third to look "inwards" at existing data about student experiences within the curriculum. Extended reports from each of these subcommittees may be found in the appendices to this report.

A look backwards affirmed that beyond balancing breadth and depth, the University has traditionally stressed flexibility and freedom of choice within the larger system of requirements. Building on the four content-based, largely disciplinary subject areas outlined in the earliest 1946 requirements—natural sciences, social sciences, arts and letters, and history, philosophy and religion—over the years the University has expanded its thinking to emphasize the skills, approaches, and aims of different courses and distribution areas, in keeping with the increasingly interdisciplinary landscape of the academy itself. The skills-based (or "ways of knowing") approach forms a larger framework for how we should ask students to invest in a coherent undergraduate education: they should be able to understand and articulate connections between courses, ideas, disciplines, and methodologies.

Looking outwards, the task force examined general education requirements at 27 institutions, primarily other Consortium on Financing Higher Education (COFHE) colleges and universities and a few flagship public universities. Among our peers, the Princeton approach to

general education has historically reflected a "middle ground" between a total absence of distribution requirements on the one hand (as at Brown) and the strict imposition of a core curriculum on the other (as at Columbia). We found that the overwhelming majority of peer institutions resemble Princeton in the structure and number of general education requirements, which tend to account for approximately one-third of the credits toward graduation. Most require coursework in four central areas (humanities, social sciences, natural and physical sciences, and quantitative or computational sciences); beyond these four basic divisions, institutions vary substantially in how they define the other areas of general education, though most do include some form of a diversity requirement. We are in line with our peers in scale and scope.

Finally, our close examination of internal data has shown that the current general education requirements do meet our goals rather well. Most students satisfy the majority of their requirements in the first two years of study and continue to take multiple additional courses outside of their area of concentration even after their general education requirements have been satisfied. Moreover, students themselves think that the current requirements work well—on the 2016 Senior Survey, only five percent of students disagreed with the statement, "Overall, I was able to find courses to fulfill distribution areas that fit my schedule and were at an appropriate level of difficulty." A majority of students experience the existing requirements as an incentive to diversify their educational experience and pursue a suitably broad course of study. On the same survey, 60 percent of graduating seniors agreed that the requirements helped them discover areas of study that they wouldn't have explored otherwise, and about the same portion (62 percent) agreed with the statement, "The general education requirements ensure that Princeton students get a well-rounded educational experience."

In concluding our report with the following recommendations, we affirm that students should complete their time at Princeton with an education that reflects both breadth and depth of study. The concentration and independent work provide students with depth; one role of the general education requirements is to provide the accompanying breadth, especially in the first two years of study. In framing the role of the general education requirements, our discussions as a task force have emphasized the importance of intellectual engagement with the different ways of knowing that structure academic inquiry and influence one's experience of the world. At the same time, we also wish to foreground the practices of critical thinking, skillful communication, and ethical reflection that characterize an engaged and educated citizenry.

Our recommendations affirm most aspects of our current system, and do not increase the total number of general education courses required. Although our primary focus concerned the A.B. program, some of our recommendations will affect B.S.E. students as well. Overall, we recommend maintaining the basic dimensions of our existing framework, which requires A.B. students to demonstrate proficiency in a foreign language, complete a first-year writing seminar, and take courses in seven distribution areas – Epistemology and Cognition (EC), Ethical Thought and Moral Values (EM), Historical Analysis (HA), Literature and the Arts (LA), Quantitative Reasoning (QR), Science and Technology (STL/STN), and Social Analysis (SA). At the same time, we believe that revisiting the general education requirements provides us with a singular opportunity to enhance and expand key features of our curriculum and to recognize and encourage the many ways in which students can develop intellectually through varied pedagogies and modes of learning, including those that take place outside of the classroom. We want to broaden the definition of "general education" to include not just courses centered on different ways of knowing, but also on a set of experiences that help ensure students extend their learning beyond the classroom setting. These "modes of learning" experiences could occur through travel abroad, participation in service and leadership opportunities, taking new courses oriented around collaborative, interdisciplinary pedagogies, or engaging in the creative frontiers of "making" that span from the humanities to entrepreneurship.

Above all, these "modes of learning" experiences should highlight the hands-on nature of problem-solving and creativity that comes by integrating theory with practice. Although we do not propose to explicitly require or give academic credit for all of these experiences, we recommend key adjustments be made to our existing calendar and curriculum to provide the space and opportunity for students to take fuller advantage of the opportunities the University offers in these directions.

The task force also agreed about two additional guiding principles as we constructed the recommendations that follow. The first concerns flexibility. We recognize that students appreciate having options and choices within the structure of our curriculum, particularly as some majors in the natural sciences now require five or more prerequisites. On the 2016 Senior Survey, for instance, about one-fourth of students agreed with the statement, "I think there are too many distribution requirements," and one-third of all respondents voiced some agreement with the statement, "The general education requirements hindered my ability to take all of the classes that really interested me." The importance of choice and flexibility within a common set of requirements is clearly important to students, and repeatedly emerged as a shared value among the members of the task force.

Along these lines, another refrain raised many times in our discussions concerned the negative consequences of "mandating" a particular subset of choices. For instance, given the expanding popularity of computer science courses on campus (not to mention the increasing significance of data science in contemporary global society), we were asked to consider whether or not a computer science course should be mandatory for all students. Recent course enrollment data in statistics and computer science demonstrate a marked increase in the proportion of students electing these courses—regardless of whether or not they satisfy the Quantitative Reasoning (QR) requirement. The portion of students who take *either* statistics or computer science has risen steadily between 2010 (67 percent) and 2016 (85 percent).

Yet the task force concluded that making such courses compulsory could counter the genuine student interest now flourishing in these areas and might diminish the enthusiasm and

vigor with which students voluntarily explore these fields. Our recommendations, therefore, offer more choice and alternatives for students, both within distribution areas and within the very structure of our academic calendar.

At the same time, the committee felt strongly that, in some areas, relying exclusively on students' own volition fails to fulfill some of Princeton's most central and cherished institutional values. International education represents one of these areas of emphasis. Princeton has historically underlined the importance of international education, offering students numerous opportunities for international study, work, and travel. We believe requiring all students to take at least one course with international content, broadly defined, would further enhance Princeton's commitment.

Likewise, the task force recommends that all students be required to take one course that addresses the intersections of culture, identity, and power, either in a local or international context. Our consensus grew from a shared belief that recognizing social structures of power and inequality is a skill that all Princeton students should acquire during their undergraduate educations. We also see this requirement as a means of signaling to our students — and indeed, to the larger world — that learning about and recognizing cultural difference is an essential part of a Princeton education. Princeton students will eventually become leaders facing global problems inextricably connected to the unequal distribution of power, such as competition over scarce environmental resources, increasing inequality both at home and abroad, and terrorism and violence rooted in longstanding religious, racial, or ethnic conflict. The ability to think critically across communities and identities — both within our nation and throughout the world — will be key for equipping a new generation of leaders to address and solve these problems.

Incorporating these two new requirements will also bring us in line with the practices of our peer institutions, most of whom require at least one or two courses that address the intersections of culture and inequality both within and across societies.¹ In both of these new areas, described further below, we recommend that the requirements be conceived of as a "tag" that will exist alongside other distribution areas, providing students a range of ways to fulfill these requirements without adding to the total requirement count.

In the remainder of this report, we describe the particular recommendations that flow from these broader organizing principles.

¹ Although the nomenclature differs, only eight of the twenty-seven institutions we studied have no such requirement, while the others require one to four courses addressing either diversity or internationalism, or some amalgamation of the two.

RECOMMENDATIONS

<u>1. Refine the list of existing general education courses to highlight those that are truly</u> <u>introductory and appropriate for the aims and goals of general education. Foster the</u> <u>development of courses that highlight innovative pedagogies and that explore social problems</u> <u>in collaborative, interdisciplinary ways.</u>

While we recognize that one feature of our current curriculum is the wide range of courses that can satisfy general education requirements, the task force concluded that tightening the list of qualifying courses would be clarifying. In fact, the benefits of a more focused, refined list of courses in general education areas has been emphasized at many points in Princeton's history (for a fuller discussion, please see Appendix B). At present, distribution areas are attached to both introductory courses and upper-level courses in many departments, although our internal data suggests that most students complete the majority of their distribution requirements in the first two years. The task force feels strongly that the Committee on the Course of Study (COCS) should reconsider and potentially revise how the existing distribution areas are described and defined, and undertake a thorough review of the alignment between these categories and our existing curriculum.

Simultaneously refining the descriptions and definitions of the distribution areas and reconsidering their attachments to existing offerings would help ensure that courses would match the requirements more fully, focusing and emphasizing the significance of the distribution area(s) to which they are attached. For instance, the task force recommends renaming the Quantitative Reasoning requirement "Quantitative and Computational Reasoning" to emphasize more accurately the range of possible courses and the significance of computational and algorithmic thinking to the general education of Princeton students.

The task force also expressed strong support for allowing courses to carry two general education designations, a change that would better capture the rich and multifaceted contours of our existing curriculum and allow students greater flexibility in finding courses of interest to satisfy their requirements. These dual-designation courses would allow students to choose one of two areas to count for their degree progress.

The task force also recommends the creation of larger, interdisciplinary "Sophomore Signature" courses that explore broad-based social issues in pedagogically innovative ways. Courses that explore topics like global migration, issues in public health, or the preservation of the environment would all be ideal for exploration in this curricular format. In the process, these courses would provide students the opportunity to select from a range of distribution requirements within a shared intellectual setting – for instance, attending a common lecture but enrolling in a precept that carries a particular general education focus. Enrollment would be open to all students, but such courses would be ideally placed in the sophomore year – a time when students must complete departmental prerequisites while still exploring the curriculum, but otherwise often lack a defining academic experience. This would create a curricular opportunity for students to deepen areas of nascent interest and find intellectual community with other students who share those developing passions. These "Sophomore Signature" courses would help students explore potential concentrations, satisfy distribution requirements, and consider their membership in a widening circle of campus and global community.

2. Require foreign language instruction for all A.B. students, regardless of existing proficiency.

The task force supports requiring all A.B. students to participate in some form of language instruction while at Princeton. Our current requirements treat foreign language as something of a skill, which sets it apart from the other requirements that emphasize the importance of different, largely disciplinary, ways of knowing. Although learning another language does involve skill and proficiency, we also see language as a critical point of entry into cross-cultural understanding. Enhanced language instruction would prepare students for deeper and sustained immersion in international contexts and give students the tools needed to more fully appreciate a different cultural worldview.

This change further underlines our commitment to internationalism in the curriculum and helps to level the playing field between students who have benefited from strong foreign language instruction in high school and those who must invest three or four semesters on campus to achieve proficiency. This change would also better align the foreign language requirement with the other distribution requirements, none of which may be satisfied with advanced placement.

We foresee that students who enter without Advanced Placement credit would still have to achieve proficiency in a foreign language through the 107/108 course level. But those students who have sufficient Advanced Placement credit or native fluency in a language other than English would be required to take at least one course at or above the 200 level in the language they have acquired, or an introductory course (101-102 sequence or higher) in a new language.

<u>3. Require all students to take at least one course with international content and one course</u> <u>that explores the intersections of culture, identity, and power. These "tags" would co-exist</u> with existing general education distribution areas.

Examining our current curriculum, we concluded that students would benefit from additional signals about particular courses that address special areas of inquiry and focus, in particular those oriented around international study, culture, identity, and power, and service. Marking such courses with a "tag" would be a straightforward and visible way of assisting students who wish to pursue sustained study in those areas and to curate a particular academic pathway alongside their departmental or certificate coursework.

We recommend that all A.B. and B.S.E. students be required to complete at least one course that concerns either the history, culture, or social context of a nation or region outside of the United States, or the study of international processes such as conflict, trade, and globalization. This international content "tag" could co-exist with any other distribution area, including a 200-level (or higher) foreign language course. Internal data suggest that most students already take courses with international content; among the Class of 2013, for instance, 95 percent took at least one course with international content, and 70 percent took three or more.² Students themselves are already quite satisfied with these courses—of graduating seniors in 2016 who said they took a course with international focus, 93 percent reported that they were either "satisfied" or "very satisfied" with the course. Making this a formal requirement further underlines our institutional commitment to international study, as well as the importance of international awareness in students' intellectual development.

The task force also supports requiring both A.B. and B.S.E. students to take at least one course that explores the intersections of culture, identity, and power in a rigorous and intentional way. Such courses would not just probe "diversity" — a word that many task force members viewed as too imprecise to be meaningful—but rather the complex ways in which aspects of cultural identity (such as race, gender, ethnicity, socioeconomic class, indigeneity, sexual orientation, and religious identification) are connected to the expression of power within both contemporary and historical social structures.

We believe that defining this requirement narrowly—situated at the nexus of identity and power—ensures that students will participate in a course that meaningfully engages the manifestations of difference and their relationship to structural inequalities. At the same time, defining cultural identity in an expansive way (to address a broad range of categories, from within a number of different disciplines and fields, nationally and internationally), will ensure that no particular ideological position dominates the courses that probe this complex terrain. Such courses, for instance, could address issues of poverty and social justice, the experiences of marginalized and/or indigenous people, the cultural dimensions of religious or ethnic conflict, or the experience of difference from the majority in particular social, historical, or cultural contexts.

Although we expect that many existing courses might fulfill this requirement, we recommend that the Committee on Course of Study also solicit proposals for new courses along these lines, especially those in seminar settings designed to facilitate open and ongoing conversation in the classroom. We expect that a wide variety of courses taught from many different perspectives could fulfill this requirement, particularly in the social sciences and

² Such courses include foreign language instruction at the 200 level or above, and courses in which "at least 50 percent of the content focused on modern societies other than the United States" (2014 Decennial Accreditation Report on International Initiatives, p. 16). These courses are also defined as those that promote knowledge of a particular non-U.S. society, the comparative study of nations, cultures, or societies, and/or knowledge of global problems as well as relationships across international communities.

humanities. Currently, about 60 percent of students report on the Senior Survey that they took at least one class that involved "the study of diversity and/or engag[ement] across cultural difference," and 90 percent of those students say that they were either "satisfied" or "very satisfied" with their experience in the course. To avoid adding to the overall number of general education requirements, we recommend conceiving of this requirement as another "tag" that would co-exist with existing designations, such as the SA, LA, HA, EC, EM, or ST.³

Finally, we also support the Service and Civic Engagement Task Force's recommendation to "tag" courses that focus on service and civic engagement. Such a tag will allow interested students to more easily find and engage in these forms of immersive learning and develop a coherent, structured approach to understanding and addressing community and global needs and concerns. Although formal guidelines are still in development, such courses would generally either include a practical service component, use service as a point of entry for engagement with the course material, or make service itself the subject of analysis. Although such "S-courses" would not be required, we believe that identifying them within the curriculum would raise their visibility and signal our institutional commitment to these goals.

<u>4. Emphasize the connection between discipline-specific epistemology and the process of research by encouraging departments to create writing-intensive methods seminars to be taken for credit in the junior year.</u>

The general education requirements are designed to help students explore the curriculum as they anticipate a concentration. Accordingly, the required first-year writing seminar gestures toward students' independent work through the culminating assignment of the research essay, in which students must pose an original question and situate its investigation in a larger scholarly literature. The rigorous freshman writing experience, however, is designed to transcend disciplinary boundaries, which means that students learn fundamental strategies of academic writing but not the particular conventions and methods specific to their future concentration.

Although it is beyond the scope of our committee's work, we suggest that the larger place of writing in our curriculum warrants a more focused review by the Office of the Dean of the College. Given the University's high expectations for students in their independent work, we should consider more carefully the ability of the current first-year writing seminar model, by itself, to adequately prepare students for writing in their concentrations.

Currently, departments approach this form of disciplinary training and mentoring in idiosyncratic ways. Some offer a formal, credit-bearing methods course, while others sponsor a noncredit-bearing colloquium that meets only intermittently. Other departments accomplish discipline-specific training in highly individualized advising settings. While this variability has

³ Unlike the international content tag, however, we do not anticipate that the culture, identity, and power tag would be an appropriate fit for most 200-level foreign language courses.

positive dimensions, it also produces inequities of experience in which some students receive course credit for this work while those in other departments do not. Workshops that do not carry course credit may also be confusing to students who assume they warrant less attention than credit-bearing courses, which leaves some students at risk of losing their footing in the absence of a structured course with regular, graded checkpoints.

Pedagogically, we see the junior year as a critical time for developing successful discipline-specific approaches to writing and analysis. About half of all 31 A.B. concentrations already offer a credit-bearing course in which students learn and practice the methods of research in their field; another 11 departments offer such instruction in a structured, but non-credit bearing manner, such as a biweekly colloquium or series of focused tutorials. We believe that all students would benefit significantly from a credit-bearing junior methods seminar that would introduce them to the analytical methods of scholarly work in their field and prepare all students for a successful independent work experience in the junior and senior years.

We recognize that variability and diversity across departments will make it difficult to frame this as a universal requirement. Nonetheless, we strongly urge departments to consider the place of epistemology within their departmental curriculum, through writing-intensive methods courses that would be designed to carry the EC designation. These methods courses would, by definition, explore the "nature, sources and bounds of human knowledge" and the "outer limits of what is knowable" within particular disciplinary fields of inquiry. These discipline-specific courses would require graded work that would complement, but not replace, the graded JP.

In conjunction with this recommendation, we encourage departments that currently require two JPs to consider whether their concentrators might be better served by a single, spring JP that counts for 2.0 units of credit.⁴ A required methods course would formalize expectations for students while also lightening the faculty advising load, particularly in large departments. Departments that currently use this model (for example, Sociology and Anthropology) assign separate, graded work in a fall methods course, but then require students to submit early portions of the JP, such as a prospectus, annotated bibliography, or literature review, at an interim checkpoint at the conclusion of the fall semester. This scaffolding helps students adopt the core practices of inquiry and analysis that produce knowledge in their fields, learn to work within a community of scholars, and prepare them to approach the robust demands of the senior thesis more independently the following year.

As we considered the structures of the larger curriculum, our task force was explicitly asked to review the recommendation of the Humanities Task Force to permit dual

⁴ This model of a year-long JP worth 2.0 credits was initially recommended by the Report of the Commission on the Future of the College in 1973, which expressed some skepticism about the utility of two distinct semesters of independent work in the junior year. Rather, the authors observed that "in almost all cases the second term is an important lead-in to the work of the senior year" (p. 196) and should be prioritized as the semester in which the most fruitful work might be expected of juniors.

concentrations. Given the importance of the senior thesis as the capstone experience for undergraduate students, the task force does not support this recommendation. We believe dual concentrations would counter the impulse for breadth in the curriculum, since students would need to focus on two main areas, likely at the expense of the interdisciplinary emphases of our existing certificate programs. Dual concentrations would also effectively devalue the senior thesis. While certificates typically encourage a merging of interests in this capstone experience, a dual concentration would require two distinct theses, resulting in less investment in both fields of study.

It might be more effective to find ways to make students' combined interests and coursework in multiple departments more visible, for example through joint or mixed concentrations. These models exist at some of our peer institutions,⁵ either as formalized tracks within departments or as a set of specific combinations, most often combining computer science with fields in the humanities. In these scenarios, a student completes more coursework than for any single major, but less coursework than for a double concentration. The senior thesis in a combined concentration would require the student to integrate both fields in a way that leads to cross-disciplinary learning, and the advising of the project would be shared across the relevant departments.

At present, the independent concentration program also allows a small number of students to combine interests across fields. A joint or mixed concentration would be different; it would exist as a standard curricular option, crafted by the department(s) and open to all students who have met the relevant prerequisites and/or received the department's approval. An independent concentration, by contrast, is a highly individualized exception in which a student petitions to be exempt from meeting the existing requirements of any one concentration in order to pursue an independent course of study.

We encourage departments to consider offering formalized joint or mixed concentrations. Several such options already exist as departmental tracks in our curriculum, including the Political Economy program in the Politics and Economics concentrations, and the options for Spanish and Portuguese concentrators to combine their coursework in SPO with a second, allied field – such as Sociology, History, Politics, or Comparative Literature. These

⁵ For instance, Harvard offers "joint concentrations," which exist as standard options in individual departments. Not all departments permit joint concentrations at Harvard, but those that do permit students to select a primary field and an allied field. Another model is the one currently being developed at Stanford, which builds a structured path for students to combine specific majors. This is a six-year pilot project begun in 2014, designed explicitly to encourage students to combine computer programming and data science with humanities fields. Participating students may now earn a BAS (Bachelor of Arts and Science) in any number of "CS+X" fields, which are designed to encourage both mastery and integration of two fields without burdening students with completing two entirely separate sets of requirements.

programs also differ from certificates in that they are primarily confined to departments, while certificate programs span disciplinary boundaries and explicitly seek to create pathways for study that transcend any particular field. While articulating the details of potential joint concentrations is beyond the immediate scope of our work, we encourage the Committee on Course of Study to consider the parameters under which it might entertain proposals for these new pathways through the curriculum. With approval from the COCS, individual departments could identify the requirements for a joint concentration, or propose an integrative path between two separate departments, for instance between English and Computer Science at the intersection of digital humanities.

5. Reform the academic calendar to create space for a three-week January term.

President Eisgruber asked the task force explicitly to consider the implications of our recommendations for Princeton's existing academic calendar. Our current calendar—which starts late in the fall and includes a comparatively short 12-week teaching period, with most of January devoted to end-of-term work during the reading and final examination periods—does not optimize students' ability to engage in a full range of learning opportunities. The task force heard from many students and faculty about the constraints they experience under the current calendar, in which students report feeling overextended and stressed during the winter break, as they anticipate their fall term finals looming in January.

In addition, international and low-income students cannot easily afford multiple trips home in December and January, and students who study abroad in the spring term at other institutions face the challenge of completing their Princeton exams abroad while beginning new coursework elsewhere. At the same time, a majority of faculty believe that student learning and course material retention would be enhanced by concluding the fall term before the winter holidays, and that their own productivity would benefit from protected time for work and departmental duties in January. (See Appendix E for a summary of the calendar survey results for both students and faculty.)

Just as important, the current intersession break, while welcomed by students, does not permit ample time for reflection and renewal, not to mention meaningful avenues into the parallel "modes of learning" that the task force endorses in areas such as international travel, service and civic engagement, research, and entrepreneurship. Our existing international programs often require students to make difficult choices about how to balance independent work with international study, or how to reconcile the competing priorities of international travel and meaningful, paid summer internships. Students appreciate innovative and immersive experiences in service, study abroad, and hands-on learning, but our existing structures do not easily permit such exploration within the confines of our fall and spring terms.

The task force believes that moving the start of the fall term earlier and concluding the fall semester in December would benefit student learning in several ways. Most importantly, a revised calendar would create space for a three-week "January term," during which students

could participate in a range of activities, including service and civic engagement as well as travel and study abroad (a recommendation also endorsed by the Regional Studies Task Force).

We propose that this period of study be reserved for both credit-bearing courses and not-for-credit co-curricular experiences that emphasize modes of learning that are less feasible during the existing terms. These might include on-campus learning via innovative and interdisciplinary pedagogies, seminars oriented around international travel, courses with intensive and hands-on "making" work in the arts and engineering, as well as off-campus opportunities such as "Princeternships" and research and travel related to students' independent work.

The new January term would be optional for students, but our expectation is that all students would participate in at least one credit-bearing January term course during their four years at Princeton. Through both credit-bearing and experiential opportunities, this space in the calendar would offer new ways for students to engage in a variety of modes of learning beyond the boundaries of the fall and spring semesters. We describe our vision for the possibilities of this new term more fully in Appendix A.

6. Offer A.B. students increased flexibility in choosing which areas to emphasize as they select their distribution courses.

In all of our deliberations, the task force sought to ensure that any changes to the distribution requirements not result in *additional* requirements, especially as many concentrations, particularly in the natural sciences, now require students to take a growing number of prerequisites. We instead recommend simplifying the current requirements by adopting a system for A.B. students that more closely resembles the flexibility afforded the B.S.E. students. Therefore, rather than formally requiring two distribution credits in Literature and the Arts (LA), Social Analysis (SA), and Science and Technology (STL/STN) we recommend that A.B. students be required to take one course in every area, but that they pick three additional areas in which to take one additional course. This gives students more flexibility to pursue their own areas of interest while completing a total of *ten* distribution credits:

- 1. Epistemology and Cognition (EC)
- 2. Ethical Thought and Moral Values (EM)
- 3. Historical Analysis (HA)
- 4. Literature and the Arts (LA)
- 5. Social Analysis (SA)
- 6. Quantitative and Computational Reasoning (QR)
- 7. Science and Technology (STL/STN)

In selecting courses to meet those requirements, students would also need to take one course tagged as containing international content, and one course tagged as exploring culture, identity, and power. These tags would coexist with existing distribution areas.

Take *one* course in each area; students pick *three* areas in which to take a second course The remaining two general education requirements—for a total of *twelve* required courses—would include:

- 1. First-year writing seminar
- 2. Foreign language requirement. Completion of a 107/108-level course (for those without advanced placement or native fluency in a language other than English), or one language course at or above the 200 level or an introductory course (101-102 sequence or higher) in a new language.

Finally, it bears mention that the task force was not of one mind about how to approach the STN and STL requirements. Some members felt that both the STL and STN should be retained as requirements, particularly because our internal data show that a majority of A.B. students continue to voluntarily take additional classes beyond the two requirements in Social Analysis and Literature and the Arts, while only a small portion of students majoring in the humanities or social sciences take additional courses in Science and Technology. Others were concerned for students who intend to concentrate in the natural sciences, who might be at a disadvantage since their concentrations typically require more prerequisites than other divisions, and it is more difficult for them to find a wide range of prerequisites that also satisfy general education requirements (when in contrast, a humanist might more easily take courses as prerequisites that satisfy several distribution areas).

At the same time, others observed that it was inconsistent to mandate that students take two Science and Technology requirements while eliminating the formal requirement of a second LA and SA course, cautioning that this would be tantamount to privileging science above the other disciplines. The task force was also undecided about whether or not a single ST requirement should include a lab (STL), particularly because so many outstanding STN courses have been added to our curriculum in recent years. As the Committee on Course of Study considers these recommendations in the months ahead, we recognize that these conversations will continue and other perspectives on these proposed changes—including input from the Council on Science and Technology—will help to inform the ultimate outcome.

Overall, however, the proposed new requirements would result in students needing to take the same number of courses as our existing requirements, although encouraging departments to develop methods courses that would count as an EC would have the net result of lowering the total requirements by one course for many students. The required courses in international content and culture, identity, and power could be satisfied concurrently with other distribution areas, and so would not require students to take additional courses.

<u>Appendix A:</u> Detailed Proposal for a January Term

Traditionally, the January Term on college campuses, including many of our peer institutions, is an instructional period that differs from the regular fall and spring semesters. With smaller, shorter courses intensely oriented around particular topics, hands-on projects, or creative/exploratory ventures, these courses offer students an opportunity to engage in innovative modes of learning, especially in the arts, service, and international travel. Courses in a "J term" are typically smaller and facilitate more relationship-building with faculty through the format's intensive, daily meeting schedule.

The creation of a successful, thriving J term will require input and collaboration from many other campus stakeholders, and for that reason we recommend that the Office of the Dean of the College establish an administrative working group that will help to answer key questions about this new curricular space, including how such courses would be taught and funded. In this appendix, we seek to propose some basic outlines for this program that will help to frame subsequent conversations about its final form and eventual implementation.

We envision a term that would last for approximately three weeks and offer students a range of learning opportunities intended to promote the exploration, reflection, and hands-on learning that is often out of reach for students during the relentless pace of the fall and spring terms. Although some opportunities might be purely co-curricular, a small set of credit-bearing courses (either full credit or half-credit) should make up the substantive core of the J term experience. This program would prioritize innovative pedagogies that are best suited to the intensive, short time frame of a three-week period, and that highlight modes of learning that transcend the traditional walls of a classroom. Likewise, course meeting time might be spent soldering a rocket, choreographing a dance piece, visiting an art museum, or engaging with other students in applied projects either on or off campus.

In addition to creating the space in which to formally emphasize these modes of learning, this new curricular format would be transformative for many of our students, especially those who need to erase a course deficiency or who would prefer not to take a fivecourse semester. This would also give students the opportunity to explore new areas of interest in an intensive, single-subject setting on which they can focus more narrowly, or prepare for intensive study in new or unfamiliar areas (such as foreign language or data science). We also expect that one emphasis of the J term would be courses involving international travel, giving students the experience of immersive learning in settings abroad during a period of time in which they are not forced to choose between competing curricular or social demands.

We do not propose that the J term be mandatory, but our expectation is that all students would take at least *one* for-credit J term class during their four years at Princeton. At the same time, creating this space in the calendar will also permit students to explore meaningful

opportunities off campus, such as longer, more intensive "Princeternship" experiences or extended research and travel for students collecting data for their independent work projects.

To create the necessary space in our calendar, we propose that the start of the fall semester be moved forward by approximately two weeks. Such an adjustment will facilitate the creation of the January term while maintaining the length of existing breaks along with the established reading and exam periods. This means that fall term classes would start on the last Wednesday in August – a start date comparable to peer institutions like Harvard, University of Pennsylvania, and Yale. The existing fall and Thanksgiving breaks would remain intact, and the fall reading period would commence in early December with exams concluding between December 17 and 23.

A two-week winter break would then be followed by the optional three-week J term; some portion of this time would remain available for the "Wintersession" opportunities currently organized by the USG, along with the popular Senior Thesis Boot Camps offered through the residential colleges. Moving the start of spring term up by one week would conclude exams earlier in May, which would ameliorate some of the conflicts that so many students currently experience at the end of the term due to our late placement of exams (for instance, in beginning summer courses elsewhere or attending a family member's graduation). In this model, Reunions and Commencement are moved up by one week, and summer would be shortened slightly, from 15 to approximately 14 weeks. Although some students may fear that a shorter summer would impact their internship opportunities, our survey of students indicates that internships rarely extend beyond twelve weeks, with most lasting ten weeks or less. In addition, the added time for internships in January should help to allay some of those concerns.

A sample calendar follows, using the 2017-2018 Academic Year for illustrative purposes only.

Academic Year 2017-2018 (Sample)

August '17					September '17				October '17											
Su	Μ	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	Μ	Tu	W	Th	F	Sa
		1	2	3	4	5						1	2	1	2	3	4	5	6	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31				
	Nc	ove	mb	er '	17			D	ece	mb	er '	17			J	anı	Jar	y '1	8	
Su	Μ	Tu	W	Th		Sa	Su	Μ	Tu	W	Th		Sa	Su	Μ	Tu	W	Th	F	Sa
			1	2	3	4						1	2		1	2	3	4	5	6
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30	31			
							31													
				' y ' 1	8				Ма	-	'18	}				Ap	oril '	18		
Su	М	Tu	W	Th		Sa	Su	М	Tu	W	Th		Sa	Su	М	Tu	W	Th		Sa
				1	2	3					1	2	3	1	2	3	4	5	6	7
4	5	6	7	8	9	10	4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	18	19	20	21	22	23	24	22	23	24	25	26	27	28
25	26	27	28				25	26	27	28	29	30	31	29	30					
		84		4.0					1		4.0					1		4.0		
0	N 4		ay '			0				ne			0	0.	N 4	_	I ly '			
Su	Μ	Tu 1	W 2	Th 3	F 4	Sa 5	Su	M	IU	W	Th	F 1	Sa 2	Su 1	M	1u 3	W 4	Th 5	F	Sa 7
6	7	1	2	3 10	4	э 12	3	4	5	6	7	1	2	1	2 9	3 10	4 11	э 12	6 13	14
6 13	14	8 15	9 16	10	11 18	12	3 10	· ·	э 12	6 13	7 14	8 15	9 16	8 15	9 16	10 17	11 18	12 19	13 20	14 21
20	14 21	15 22	23	24	25	26	10	11	12	20	14 21	15	23	15	23	24	25	19 26	20 27	21 28
20	21 28	22 29	23 30	24 31	20	20	24		19 26	20 27	21	22 29	23 30	22 29	23 30	24 31	20	20	21	20
21	20	29	30	31			24	20	20	21	20	29	30	29	30	31				
								ſ	lass	ec i	n ۲	acci	nn							
																_				

Breaks/classes not in session

Reading period

Dean's Date

Exam Period

January term (NEW)

<u>Appendix B:</u> General Education in the Context of Princeton's History

In its look backward at the long history of general education requirements at Princeton, the Task Force focused its attention on the shift between two key historical moments: from the comprehensive four-year plan implemented in 1946, to the establishment of the current model, which dates to the mid-1990s and marked the first major revision of these requirements in five decades. Both sets of requirements framed themselves as a response to the changing landscape of higher education and the emergence of new areas of academic inquiry.

Though written in the wake of the Second World War and against the backdrop of shifting demographics of higher education after the G.I. Bill, the new requirements in 1946 were also specifically attributed to the expansion of physical and social sciences in previous decades. The new distribution areas in the 1990s marked, among other things, an emphasis on interdisciplinary research, including the emergence of area studies departments and an increasing number of certificate programs.

The 1946 document, "The Idea of a Princeton Education," provides an account of the changes in undergraduate education at Princeton in the first half of the century. Woodrow Wilson, who became President of the University in 1902, implemented a "limited curriculum" model in which departments narrowed their required courses to a purposeful set. Students were encouraged to explore courses outside of their concentration and to use electives to fulfill the remaining requirements for degree completion.

In 1925, under President John Hibben, the limited curriculum model was combined with the requirement of independent work in the junior and senior years in lieu of a fifth course. This new requirement, which originally entailed self-directed study within a student's department in close consultation with an academic adviser, would eventually become the junior paper and senior thesis. Even in its earliest form, this requirement provided for independent work that bridged multiple departments and combined methodologies. Given the establishment of new programs like the School of Public Policy and the Program of Study in American Civilization, the introduction of independent work became one way to account for an increasingly interdisciplinary academy.

In light of these earlier changes to the last two years of study, the requirements outlined in 1946 marked an attempt to organize the entire four-year program of every undergraduate, with particular attention to what the University called the "haphazard and unguided" period of the freshman and sophomore years. The updated recommendations described three categories of required courses: broad distribution requirements, narrower divisional requirements, and finally, classes specific to one's concentration. In their first two years, A.B. students would fulfill distribution requirements by taking two courses in each of the four following areas of study: natural sciences, social sciences, arts and letters, and a final category that included history, philosophy, and religion. The report describes this last category as a set of "approaches to knowledge," in contrast to the "areas of knowledge" represented by the sciences and humanities.

In addition to these distribution requirements, the University also required coursework based on a student's selection between one of three divisions (natural sciences, social sciences, and humanities) in the sophomore year. Ideally, these divisional requirements would bridge the broader distribution requirements and the student's specific concentration. Finally, students would complete departmental requirements in the junior and senior years, along with their independent work. Overlap among these requirements meant that, combined, they would account for roughly three-quarters of a student's course of study; elective courses could fulfill the remainder of the credits for degree completion.

Though never implemented, the proposal of a less managed curriculum in 1973 provides a counterpoint to the 1946 requirements as well as their revision at the end of the century. The 1973 "Report of the Commission on the Future of the College" presents a more philosophical consideration of general education requirements. It agrees with the premise that the University should teach basic skills for knowledge acquisition and production alongside a set of distribution requirements.

In the first category, however, the report recommends only English composition as a necessary skill. In the second case, with regard to distribution areas, the report collapses the previous categories into a more general set of requirements. Given the artificial boundaries between disciplines, the report recommends retaining a science requirement (two one-term courses in the natural sciences for all A.B. students), but it suggests that the other six courses can be drawn from anywhere else in the curriculum. Still, these recommendations were never formalized, and requirements in place for the decades that followed were fundamentally unchanged from those implemented in 1946.

The most recent overhaul of general education requirements was a product of President Harold Shapiro's renewed focus on the undergraduate experience at Princeton. As in 1946, these new requirements marked an attempt to structure the four-year plan with particular attention to first two years of study. The initial proposal, which appears in the 1993 Report of the Strategic Planning Committee, notes the tendency for students in their first two years to enroll in large lecture courses, and it also points to a "relatively impoverished" sophomore year.

Additionally, to account for a shifting academic landscape, including the emergence of new fields as well as the increasingly interdisciplinary work within traditional departments, the new requirements chart an important transition in the categories of required courses. In lieu of content or subject matter, the new requirements would emphasize process, methods, and "ways of knowing." This report also recommends increasing the cumulative requirements for the A.B. degree from 30 to 32 credits, with both additional courses to be taken in the first two years of

study; the stated goal was to achieve greater parity with the requirements in the School of Engineering. Likewise, the updated distribution requirements for the A.B. degree would extend to B.S.E. students, who would need to complete a course in four of the five non-STEM areas.

Above all, we should note that this process of revision was protracted and iterative. The Strategic Planning Committee released its initial report in summer of 1993, but faculty did not vote on the new requirements until spring of 1995, and the changes that were ultimately implemented were themselves subject to several revisions. Pressure from departments and from individual faculty members meant that, especially as the outcome grew nearer, the final proposal was the product of compromise. Faculty objected to the omission of certain areas of study (cognition and linguistics, in particular), the nomenclature of certain categories ("Moral Reasoning" seemed unwieldy; there was outspoken resistance to "Aesthetic Analysis and Creative Expression" as well as "Aesthetic Analysis and Practice"), and they disputed the relative weights of different areas (in particular, faculty complained that Historical Analysis was overemphasized).

In the recalibration of the initial proposal, described in a September 1994 memo to the faculty, Cognition and Understanding became Epistemology and Cognition; the Aesthetic Analysis category was renamed Literature and the Arts; and Historical Analysis was reduced from two courses to one. Later, in 2010, the Council on Science and Technology introduced the STN/STL distinction, which lowered the lab requirement to one course instead of two. Although the recommendations began with a desire for departments to develop a short list of courses that might fulfill the new requirements, this ideal was eventually abandoned. Adjusting the number of credits for the A.B. to 31, instead of the then-current 30 or proposed 32, was the product of a last-minute compromise.

In the process of updating Princeton's general education requirements, the strategic planning process under President Shapiro also evaluated the possibility of a diversity requirement. In response to the March 1993 report on race relations at Princeton, the Committee on Diversity and Liberal Education issued a 1994 report that anticipated a number of issues in more recent conversations: the challenge of defining diversity, and the presence of current offerings alongside the problem of self-selection, especially within certificate programs.

The report, however, concludes against implementing a formal requirement and instead calls for a broader integration of the relevant modes of inquiry. To this end, the Committee recommends the expansion of the American Studies Program, Freshman Seminars, Residential College Seminars, and Student-Initiated Seminars, as well as additional certificate programs in Asian-American studies and Latino studies. It also calls for devoting \$50,000 annually, over four years, for course development, with the goal of five new or substantially revised courses per year, alongside the development of co-curricular resources including conferences, lectures, and faculty and graduate seminars on teaching diversity. Ideally, the University's new

offerings would include high-profile courses at the cutting edge of scholarship and instruction, and these would attract high levels of enrollment without the imposition of a requirement.

Above all, the history of general education requirements at Princeton, especially in recent decades, illuminates a few important features of the current process: revision of the current requirements will inevitably face resistance. At the same time, just as changes in academic disciplines and demographics led to a new set of requirements at mid-century, the further evolution of higher education—with regard to technology, globalization, and social issues—will continue in ways that will, in the future, demand further adaptation in determining what every educated person should know.

<u>Appendix C</u>: Peer Institution Data

We reviewed the undergraduate academic programs at twenty-seven peer institutions, including Ivy League schools, private and public research universities, and small liberal arts colleges:

Ivy League	Private Research	Public Research	Small Liberal Arts
Brown	Duke	UCLA	Bryn Mawr
Columbia	MIT	UC Berkeley	Middlebury
Cornell	Stanford	U of Michigan	Oberlin
Dartmouth	U of Chicago	U of Washington	Pomona
Harvard	Cal Tech	U of Wisconsin	Swarthmore
U of Penn	Carnegie Mellon	UT Austin	Williams
Yale	Northwestern		
Yale-National University			
of Singapore (also known			
as Yale-NUS)			

General Education Models

Our research identified three different general education models. Schools without a set of general education requirements follow an **open** model; Brown is the only example here. Students at Brown develop their own "individualized programs of study across multiple departments" and have very few university-wide academic requirements. To graduate, they must pass a total of 30 classes, two of which must be writing courses, and they must satisfy specific requirements within their concentrations.

Schools giving students the opportunity to take courses across the curriculum to fulfill an array of breadth requirements follow a **distribution** model. Most of these schools articulate their general education requirements as "ways of knowing" rather than department or discipline-specific classes. Princeton's curriculum is a prime example of this model. A Princeton student does not have to take a specific "Social Studies 101" class, but instead must fulfill a broader "Social Analysis" requirement, and can do so by choosing from a long list of classes on a wide range of topics, from "Issues in American Public Health" to "Anthropology of Religion" to "Corporate Restructuring." A majority of our peers also follow this model, including Cornell, Dartmouth, Harvard, University of Pennsylvania, and Yale.

Schools requiring a specific set of purpose-developed general education classes that do not fulfill other functions in an undergraduate's educational plan follow a <u>core</u> model. Students at these schools enroll in specific "core" foundational courses or course sequences. Sometimes all students take the exact same course (following the same syllabus and reading the same

texts), and sometimes they can choose from a very limited set of offerings. Columbia and the University of Chicago are prime examples of this model.

The contrast between core and distribution schools can be striking. For instance, while Columbia students take the same Literature and Humanities course to fulfill their "Humanities" requirement, and University of Chicago students select one of only eight possible course sequences to fulfill theirs, Princeton students can choose from over 200 courses in any given semester to fulfill their "Literature and the Arts" requirement. Furthermore, while distribution schools like Princeton let students count at least some general education classes towards their concentration (and concentration classes towards general education requirements), core schools typically do not allow double counting; the core is a separate block of requirements that can serve no other function.

Open Model	Distribution Model	Core Model	Core/Distribution
			Blend
Brown	Cornell	Columbia	Bryn Mawr
	Dartmouth	Yale-NUS	Carnegie Mellon
	Harvard	MIT (science core)	UT Austin
	Princeton	Cal Tech (science core)	
	University of	U of Chicago	
	Pennsylvania		
	Yale		
	Middlebury		
	Oberlin		
	Pomona		
	Swarthmore		
	Williams		
	Duke		
	Stanford		
	Northwestern		
	UCLA		
	UC Berkeley		
	U of Michigan		
	U of Washington		
	U of Wisconsin		

General Education Requirements: Areas of Knowledge and Skills

Even though the specifics of their models can significantly vary, most liberal arts institutions require general education classes that make up about one third of the bachelor of arts curriculum and ensure proficiency in three basic areas of knowledge—the humanities, the

social sciences, and the natural sciences—as well as three basic skill sets, including writing, foreign language, and quantitative reasoning.⁶

Schools define and interpret the three "areas of knowledge" in different ways. For instance, some schools let History Department classes count *only* for the "Social Sciences" requirement; some let them count *only* for the "Humanities" requirement; and some let them count for either area. Additionally, some institutions, like Princeton, bundle the visual and performing arts with the humanities (the "Literature and the Arts" requirement), but some schools, like UCLA and University of Michigan, have a humanities requirement and then a separate creative arts requirement. (So while a Princeton student could graduate having taken two English classes and no visual or performing arts classes, a UCLA student will graduate having taken both English *and* visual or performing arts classes.)

Schools also define and interpret the three "skill" requirements in different ways, especially writing and foreign language.

Writing

All peer institutions have a writing requirement (even Brown's open model curriculum requires students to enroll in two writing courses), but the specifics of the requirements vary. Many schools, like Princeton, require students to enroll in one semester-long freshman writing seminar; examples include Harvard, Columbia, University of Pennsylvania, Pomona, Carnegie Mellon, and the University of Washington.

Other schools require more than one writing seminar. Brown, Cornell, Yale, and Oberlin all require two writing courses. Dartmouth and Middlebury also require multiple writing classes, but in both cases one of the required classes is a special course that sounds more like a Princeton Freshman Seminar (a small, discussion-based course on a special topic for 22 or fewer students) than a writing seminar. Some schools, like the University of Michigan, make students take both a freshmen writing course and an upper-level writing course. Brown takes a similar approach to its two-class requirement, demanding that students take one seminar during their freshman or sophomore years, and one during their junior or senior year. Some schools go further and actually require students take writing intensive courses in their majors; these classes teach students how to write in their specific fields of study.⁷ Examples include Bryn Mawr, where students must enroll in not only a basic writing seminar, but also a 200- or 300-level class in their major that is deemed "writing intensive," and Stanford, where students have to take one freshman course, one sophomore course, and one "Writing in the Major" course.

⁶ Many schools formally divide the curriculum into these two categories called "areas of knowledge" and "skills."

⁷ This seems to approximate the Princeton Junior Seminar, at least in certain departments like English.

Additionally, some schools require students take "writing intensive" classes. These are not writing seminars; rather, they are "normal" classes (in academic departments or disciplines) that have special writing requirements (see next paragraph). For example, Cal Tech mandates that three of a student's twelve humanities and social sciences classes be "writing intensive"; Williams requires two "writing intensive classes"; and UT Austin requires students take a "Writing Flag class," which, according to their website, can be found "in virtually every department at UT."

At most universities, a writing seminar or "writing intensive" class has distinct characteristics. Writing pedagogy is part of the course content (the professor leads writing lessons in class and facilitates peer review sessions); the professor designates a certain number of writing assignments and/or specifies a required quantity of writing (often in the 15-25 page range); a percentage of the student's grade is based on writing assignments (minimally 30 percent at UT Austin; 25 percent at Yale); enrollment is limited (usually 15-20 students) so the professor can give in-depth feedback on assignments; and students have opportunities to revise at least one of their assignments.

Schools with One Semester- Long Freshman Writing Class	Schools where Freshman Seminars are part of the Writing Requirement	Schools with a "Writing in the Major" Requirement	Schools requiring "Writing Intensive" Courses
Harvard Columbia Princeton U of Penn Pomona College Carnegie Mellon U of Washington	Dartmouth Middlebury	Bryn Mawr Stanford	Cal Tech Duke Williams UT Austin

Foreign Language

A majority of our peers have a foreign language requirement, but most allow incoming students to either test out or test into more advanced classes based on their performance on Advanced Placement exams, SAT II Subject Tests, or internal placement exams. Schools also typically take native language abilities into consideration.

Several schools, including Cornell, Yale, Bryn Mawr, and Duke, let students test out of lower-level classes but still require students to continue their studies at the university. Yale claims that high AP scores only represent an "intermediate" proficiency, so students must either take advanced courses in the language they already know or advance to level two in a new language. The pass/fail policy for foreign language courses varies widely. At some schools, the foreign language class is the only course students can pass/fail. For example, Stanford's policy states, "Unlike other general education requirements, foreign language courses may be taken on a CR / NC basis to fulfill the requirement." At other schools, including Princeton and the University of Pennsylvania, the foreign language class is the only course that students cannot take pass/fail and must take for a letter grade.

On the other hand, some of the schools we examined, like MIT, Cal Tech, and Carnegie Mellon, have no foreign language requirement. It is important to note, however, that the first two schools offer more science- and engineering-focused programs (MIT and Cal Tech culminate in a B.S., rather than a B.A.), so foreign language proficiency is not required in the curriculum because students need room in their schedules for additional math and science classes.⁸ Oberlin has no formal foreign language requirement, but a foreign language course can fulfill the "Cultural Diversity" requirement. Similarly, Williams has no formal language requirement, but students can fulfill the "Exploring Diversity" requirement through "foreign language courses that explicitly engage in the self-conscious awareness of cultural and societal differences, traditions, and customs as an integral aspect of language study." Both Oberlin and Williams count foreign language courses as "diversity" courses.

Diversity and International Studies

We also took careful note of our peers' diversity and international studies requirements. Princeton is among only a handful of schools that do not currently explicitly address diversity in their general education requirements; others include Yale, Yale-NUS, Swarthmore, MIT, Cal Tech, and Northwestern. Two schools have "optional" diversity components: Brown offers Diverse Perspectives in Liberal Learning classes, and Pomona offers Dynamics of Difference and Power classes, but neither requires them. The other 19 schools require one or more diversity courses.

Even though a majority of our peers have some kind of requirement, they all interpret "diversity" in different ways. Some only require classes about diversity in the United States;

⁸. Princeton B.S.E. students also do not have to fulfill a foreign language requirement. This brings up a larger question about General Education requirements in A.B. programs versus those in B.S.E. programs. At some schools, B.S.E. students have a unique set of General Education requirements; most schools with this arrangement have separate engineering programs. Examples include Columbia, Cornell, Princeton, Penn, Duke, Carnegie Mellon, UCLA, Berkeley, Michigan, Washington, and Wisconsin. However, several schools do ask engineering students and liberal arts students to complete the same General Education program. Examples include Dartmouth (all engineers earn a Dartmouth A.B. and then take additional courses to earn the B.E. degree), Yale, Stanford, and UT Austin. Additionally, at small liberal arts colleges like Bryn Mawr, Middlebury, Pomona, Swarthmore, and Williams, students usually enroll in 2-3 or 4-1 programs where they divide their undergraduate career between the college and a partner research university's engineering program.

some only require classes about diversity outside of the American context; some give students the option to take a class about either type of diversity; and some require students take classes about both types of diversity.

Many schools have one generic "diversity" requirement that students can fulfill with either courses on diversity in America or courses on diversity outside of America. Typically, students pick from a large list of offerings (often 50 to 100+) representing dozens of departments and disciplines. Schools with this type of requirement include Williams ("Exploring Diversity Initiative"), Duke ("Cross-Cultural Inquiry"), and Stanford ("Engaging Diversity").

Some schools have a requirement that is clearly either diversity in America or diversity outside of America, but not both. For example, while the University of Wisconsin's Ethnic Studies requirement only focuses on "marginalized racial or ethnic groups in the United States," Columbia's Global Core requirement mostly focuses on international cultures.

Some schools have two separate requirements, one for American diversity and one for international diversity. Examples include Harvard ("U.S. in the World" and "Societies of the World"), University of Pennsylvania ("Cultural Diversity in the U.S." and "Cross-Cultural Analysis"), Berkeley ("American Cultures Breadth" and "International Studies"), and UT Austin ("Cultural Diversity in the U.S." and "Global Cultures").

Some schools have additional specific requirements within the diversity requirement. For example, Cornell has both geographic and historical breadth requirements; one course must focus on people other than those of the United States, Canada, or Europe, and one course must focus on a period of time before the 20th century. Dartmouth's World Culture requirement requires one Western class, one Non-Western Class, and one Culture and Identity class. Middlebury requires one class on Africa, Asia, Latin America, Middle East, or the Caribbean; one class on "comparing cultures" or "identity and experience of separable groups within cultures"; one class on European cultures; and one class on cultures of North America.

All of these differences explain why the total number of required diversity classes widely varies. In fact, it ranges from zero classes (Brown [optional], Pomona [optional], Cal Tech, Swarthmore, Yale, Yale-NUS, MIT, Northwestern) to one class (Bryn Mawr, Chicago, Cornell, Williams, Stanford, UCLA, Michigan, Washington, Wisconsin) to two classes (Columbia, Harvard, Penn, Duke, Carnegie Mellon, Berkeley, UT Austin) to three classes (Oberlin and Dartmouth) to four classes (Middlebury).

Schools with "Optional" Diversity Classes	Schools with a generic, inclusive requirement (students have freedom to study American <i>or</i> international diversity)	Schools with requirement focusing on international cultures	Schools with requirement focusing on American Diversity	Schools with American Diversity and International Studies Requirements	Schools with specific geographic and/or historic guidelines <i>within</i> their requirement
Brown Pomona	Williams Duke Stanford UCLA U of Michigan U of Washington Bryn Mawr Oberlin	U of Chicago (mostly) Columbia (mostly) Carnegie Mellon	U of Wisconsin	Harvard U of Penn Berkeley UT Austin	Cornell Dartmouth Middlebury

In recent years, universities without diversity requirements have received unique proposals and recommendations (in favor of a requirement) from their students. For instance, in 2014, Swarthmore students recommended "Diversity Lectures" be held on Friday afternoons from 1:00 to 2:00 p.m. and asked the administration to make the lectures required for first-year students and open to others. Recently, the MIT Black Students' Union recommended a new "Immersion Studies" elective and asked the administration to develop "Diversity Orientation" and "Online Diversity Training" programs for incoming students. As recently as December 2015, Yale students were debating an "Ethnic Studies" requirement.

Civic Engagement and Co-Curricular Courses

We were also asked to consider the task force's recommendation to "tag" courses that explore service and civic engagement. None of our peers have a civic engagement requirement, but two schools do allow co-curricular activities to fulfill a requirement. At Oberlin, two of their required 32 courses may be fulfilled through ExCo, an "Experimental College" where classes are taught by students, administrators, townspeople, and faculty and include a range of courses from "Beginning Improv" to "Beginning Tap Dance" to "Puppet Cabaret" to "Survey of Queer Latin American Literature" to "Debate and Public Speaking" to "Investigative Restorative Justice." At Carnegie Mellon, engineering students have an "experiential learning" requirement, which they can fulfill by holding a leadership position in a club. (While there is no civic engagement requirement at Carnegie Mellon, a student could theoretically get credit for holding a leadership position in a civic engagement club.) Additionally, in 2007, Harvard's General Education Task Force recommended an "activities-based learning initiative" in the hopes of finding a way to bridge the gap between academic and extracurricular life; this may have informed the way they structured their relatively new activities-oriented J term, "Optional Winter Activities Week."

Pass/D/Fail (PDF) Policies

We also found that general education PDF grading policies significantly vary. Some schools do not let students PDF any general education requirements; this is the case at Columbia, Dartmouth, Harvard, Penn, Yale, Middlebury, Oberlin, Williams, Yale-NUS, Stanford, Carnegie Mellon, Washington, Wisconsin, and UT Austin. Some schools allow students to PDF a certain number of their requirements, but the number ranges from three classes to eight classes to "as many as you want as long as they're not in your major." At Brown, almost all can be elected "Satisfactory/NC."

At Princeton, students can elect to PDF a total of four classes over their four years (no more than one per semester); all general education requirements, with the exception of the writing seminar, foreign language courses, and classes counted towards the concentration, are eligible for PDF. Bryn Mawr also allows up to four units over four years.

Pomona permits students to PDF general education courses; specifically, students can PDF up to three classes per year freshman and sophomore year, and then they have unlimited P/NC options outside of their major junior and senior year. Duke allows one PDF per semester. Northwestern and UCLA allow one per quarter. Berkeley mandates that no more than onethird of a student's total completed units can be taken pass/fail; students cannot PDF writing, foreign language, quantitative reasoning, and major requirements, but they can PDF their "American Cultures" and seven-course breadth requirements. At Michigan, students can take up to 30 credits pass/fail; off-limits are courses in the concentration and fourth-semester language courses.

Three schools boast special PDF policies. At Swarthmore, the only grades recorded during the first semester of freshman year are CR/NC; all students take all classes PDF the first semester. After that, students can take four more classes CR/NC. At MIT, freshmen are graded pass/fail in the first semester and J term; in the second semester, they are graded A, B, C, or No Record. Only during sophomore year do they begin the A-F system; they cannot PDF anything after that. At Cal Tech, the students' first two terms are graded entirely pass/fail; after that, they can take up to two elective courses pass/fail.

Honors Programs

Finally, it is important to note that while honors programs exist at UCLA, UC Berkeley, Michigan, Washington, Wisconsin, and UT Austin, honors students do not typically have drastically different general education requirements. They usually have most of the same requirements—they might simply take special honors sections of those requirements. They also take a few extra seminars and complete independent projects.

Appendix D: Internal Data

The task force solicited extensive data to review students' experience with the existing general education requirements. This included four focus groups, a review of enrollment data from the Registrar about how students satisfied the general education distribution requirements from 2010 to 2016, as well as a panel of questions asked of graduating students on the 2016 Senior Survey. We focus here on the key findings gleaned from each of these sources.

Focus Groups

The task force initiated its collection of internal data by holding four focus group meetings that invited students to speak to delegations from the task force – three were held in the fall term, and one in the spring. Although it is difficult to synthesize the conversations across all of these different (and often spirited) gatherings, some common themes emerged. Most importantly, students voiced a desire for general education requirements that were truly invitations to discovery and disciplinary diversity. Most students endorsed a set of requirements that would simultaneously introduce them to a breadth of knowledge and perspectives while also connecting to real-world problems with practical applications.

Students used the phrase "box-checking" more than once to describe how they sometimes experienced the courses they selected for their general education requirements. Along these lines, they also emphasized their appreciation for the range of courses offered in each distribution area. Students particularly underlined their appreciation for course offerings in STL/STN areas pitched to non-scientists, and questioned whether or not similar courses exist (or should exist) in the humanities.

Even though additional survey data (discussed further below) suggests that, on the whole, students find the requirements helpful guideposts along their academic pathways, some students did complain that the required distribution areas – especially when coupled with the number of prerequisites needed for many scientific fields – meant that they ultimately couldn't take all of the classes they wanted to explore.

Students were fairly united in their desire that courses be permitted to count for more than one distribution area, a flexibility not permitted in our present system. Students spoke of their confusion, at times, when taking a course that was listed as satisfying one distribution area but more closely resembled, in their view, a course associated with another. In keeping with the larger theme of flexibility, students indicated that they would appreciate the option to choose a distribution area to "count" toward their degree progress in courses that truly addressed more than one area. Students felt this would permit more options to pursue the courses and subjects that captured their interest while also making steady progress toward satisfying their requirements. Finally, we explicitly asked students to share their thoughts about a potential "diversity requirement." The first three focus groups were held, coincidentally, during the fall term of 2015 soon after the most intense period of student activism. In their feedback, students emphasized their hope that any potential requirement be designed in such a way that the affiliated courses would truly challenge all students' pre-conceived notions and understandings of identity, and not be a refuge for students to gather with like-minded colleagues and have their existing viewpoints affirmed and reiterated.

Course Enrollment Data

Our review of enrollment data for the cohorts of 2010-2016 reveals that most A.B. students take the majority of their distribution requirements in the first four terms, with the exception of the second ST, SA, and LA. It's not unusual for Social Science and Humanities concentrators to take their second ST later in their academic career, for Natural Science and Humanities concentrators to take their second SA between term 5-8, and for Natural Science and Social Science concentrators to take their second LA in their later semesters.

In addition, a number of departments end up taking responsibility for a substantial fraction of the courses students use to fill general education requirements. For example, Philosophy 203 fulfilled the EC for 11% of students, and Philosophy 202 fulfilled the EM for 13%. Examining the "market share" of the top five courses for each general education requirement illustrates the range of curricular variety available to students in each of these areas. The least variation exists among the QR and SA categories while the most variety appears among LA and HA courses. While the top five courses in QR and SA capture nearly half of the market in these areas, the top five most popular courses in LA and HA areas represent only 14% and 19% of the market, respectively.

Area	% Share	Top 5 Courses, Cohorts 2010-2016
EC	42%	PHI203 (11%), PSY254 (11%), LIN201 (9%), PHI205 (6%), PSY208 (5%)
EM	43%	PHI202 (13%), POL210 (11%), CHV310 (8%), REL261 (8%), WWS301 (4%)
HA	19%	HIS383 (6%), SOC250 (4%), HUM217 (4%), REL225 (3%), CEE102A (3%)
LA	14%	MUS103 (4%), HUM216 (3%), ENG220 (2%), CLS212 (2%), ART101 (2%)
QR	48%	MAT103 (14%), MAT201 (10%), MAT104 (9%), COS126 (8%), CAS 109 (6%)
SA	47%	ECO100 (19%), ECO101 (16%), SOC101 (4%), PSY252 (4%), POL240 (4%)
ST	35%	PSY101 (12%), CHM201 (6%), CEE262B (6%), MOL214 (6%), CEE102B (5%)

In light of our specific charge to consider a diversity requirement, we paid careful attention to the courses that students take to satisfy the SA requirement, as many courses with this designation might well address issues of cultural identity and inequality. However, our analysis concluded that as presently defined, the SA is not equivalent to any reasonable definition of a diversity requirement. More than one-third of all A.B. students satisfy one or both SA requirements with ECO 100 or 101, and the percentage of B.S.E. students who used an ECO class to satisfy the SA requirement ranged between 52-62% during this time period. Other "top five" SA courses for A.B. students included PSY 252 (Abnormal Psychology) and POL 240

(International Relations). Of these popular SA options, only SOC 101 would likely address issues of culture, identity, and power, and only as one portion of a larger survey of the discipline.

We also examined carefully the QR requirement, since we were charged with considering whether or not a formal requirement in computer or data science should be incorporated into our general education requirements. Here, we noted clear trends: specifically, the portion of students who take either stats or COS has been rising steadily between 2010 (67%) and 2016 (85%).

Finally, we looked closely at course enrollment patterns to consider how onerous students might find the requirements in actual practice. One measure is how many students outside of the relevant division take more than the minimum requirements in each category. In other words, do students majoring in a humanities field continue to take courses with an SA or QR designation? Do scientists persist in taking courses in the humanities after they've satisfied their LA requirements? The following table provides an overview (rounded to the nearest 5%) of the portion of students majoring in each division who choose to take at least one or more additional course in each distribution area:

	Humanities Concentrators	Natural Science Concentrators	Social Science Concentrators
EC	40%	50%	25%
EM	50%	20%	55%
НА	60%	25%	75%
QR	30%	80%	60%
LA	95%	60%	70%
SA	60%	60%	97%
ST	20%	85%	20%

The table above indicates that a healthy portion of students continue to take courses in distribution areas outside of their concentration – for instance, 70% of students majoring in a social sciences field take more than two LA courses, and 60% of humanities concentrators take additional courses with the SA and HA designations. The main exceptions appear for STL and STN; only 20 percent of students majoring in humanities or social science fields go on to take additional ST courses after satisfying these requirements. In addition, only 25 percent of natural science concentrators take additional HA offerings, and only 20 percent take other EM courses (although we suspect that this may be partly about the relative scarcity of EM offerings). Overall, these data indicate that while students will voluntarily explore additional offerings in most areas, nonscientists are especially reluctant to do so in the area of Science and Technology.

2016 Senior Survey

On the 2016 Senior Survey – which has a nearly 100 percent response rate among our graduating students – we asked a series of questions about the general education requirements, starting with students' motivations for choosing which courses to take to satisfy those requirements. General interest was the most pronounced motivator, followed by the reputation of the course and professor.

How important were the following factors in shaping which courses you took to satisfy these
requirements?

Question	Not important	Somewhat important	Important	Very important	Extremely important
Reputation of course/professor	11%	18%	25%	31%	15%
General interest in subject matter	1%	5%	22%	44%	28%
Convenience of meeting time	5%	17%	39%	28%	11%
Assurance that the course wouldn't be too difficult/far outside of my comfort zone	9%	29%	33%	20%	9%
Desire to explore a new or unfamiliar subject	7%	28%	41%	20%	5%
The ability of course(s) to satisfy pre-requisites for potential concentrations or certificates	14%	21%	31%	24%	10%

We also asked students to evaluate a set of statements about general education, including their opinions about the number of requirements, the fit between the designation and the courses they took, as well the effect of general education on their academic trajectories.

Question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
The general education requirements encouraged me to discover areas of study that I wouldn't have otherwise.	4%	14%	22%	47%	13%
The general education requirements helped me to explore potential majors.	13%	35%	25%	22%	5%
The general education requirements hindered my ability to take all of the classes that really interested me.	10%	32%	25%	23%	10%
The general education requirements ensure that Princeton students get a well-rounded educational experience.	4%	9%	25%	47%	15%
Overall, I was able to find courses to fulfill distribution areas that fit my schedule and were at an appropriate level of difficulty.	1%	4%	14%	62%	19%
The courses I took didn't always match the descriptions of the distribution requirements they fulfilled.	4%	24%	36%	31%	6%
I think that there are too many distribution requirements.	9%	33%	32%	17%	9%

Please indicate how strongly you agree with each of the following statements:

Overall, the results indicated that most students did experience the general education requirements as broadening their interests and that they were able to find ample courses to satisfy each area. At the same time, a third of students either agreed or strongly agreed with the statement "The general education requirements hindered my ability to take all of the classes that really interested me", and more than a third felt that the courses they took did not always match the description of the attached general education requirement. That said, most students seem to be satisfied with the number of requirements; only 26% agreed that "there are too many distribution requirements."

Finally, we asked students to rate their experience in different general education areas. In this evaluation, the highest marks went to courses in historical analysis, social analysis, and literature and the arts, areas with the most choice and variety among our existing curricular offerings. At the same time, the courses in which students reported higher levels of dissatisfaction (ranging from 16 to 34 percent) were in areas where fewer courses exist to satisfy those requirements, particularly ethics and moral values, epistemology and cognition, quantitative reasoning, science and technology, and the writing seminar.

Question	Very dissatisfied	Generally dissatisfied	Generally satisfied	Very satisfied	Not applicable
Courses in scientific thinking and reasoning (STN and STL)	5%	16%	43%	19%	16%
Courses in computer science, math, or data analysis (QR)	7%	20%	40%	21%	13%
Courses in the creative arts and humanities (LA)	1%	5%	37%	55%	3%
Courses in ethics and morality (EM)	3%	14%	40%	35%	8%
Courses in epistemology and cognition (EC)	3%	13%	46%	31%	7%
Courses in social science (SA)	1%	8%	42%	45%	4%
Courses in historical analysis (HA)	1%	8%	37%	47%	7%
Writing seminar	14%	20%	42%	24%	1%
Instruction in a foreign language	3%	7%	29%	39%	22%
Courses that incorporated service or civic engagement	1%	2%	15%	11%	71%
Courses in international studies, including courses about non- Western civilizations	1%	3%	28%	28%	40%
Courses that addressed the study of diversity and/or engaging across cultural difference	2%	4%	28%	25%	41%

<u>Appendix E</u>: Calendar Survey Data Summary

In March of 2016, a survey co-sponsored by the Dean of the College, Dean of the Graduate School, the Undergraduate Student Government (USG), and Graduate Student Government was distributed to all students and faculty members, inviting them to share their thoughts about potential changes to the academic calendar. The task force was charged with considering how its recommendations would influence the academic calendar, and so the survey's main purpose was to gather feedback on the various trade-offs inherent in any proposal to alter the existing structure of the fall and spring terms. For its part, the General Education Task Force was particularly interested in the kinds of learning opportunities that a revised schedule might afford, while a particular issue of interest to the USG concerned starting the fall term earlier and concluding exams before winter break.⁹

The USG sought to quantify how students experience the existing calendar structure, which many students allege causes them additional stress during fall-term exams and creates difficulties for students in aligning their study abroad or internship plans with other institutions. Indeed, a substantial portion of both undergraduate and graduate students say that having two separated breaks interrupted by required exams creates financial hardships for their families. About 97 percent of undergraduates and 77 percent of graduate students say they return home for winter break, and 42 percent of undergraduates and 25 percent of graduate students travel home for intersession. More than one-third of student respondents (35 percent of undergraduates and 37 percent of graduate students) indicated that having these two separate break periods posed financial difficulties for their families.

Response rates on all three surveys were relatively strong. Approximately 48 percent of undergraduates (N=2525) completed the survey, along with 31 percent of graduate students (N=817) and 44 percent of faculty members (N=483). Faculty surveyed included lecturers as well as tenured and tenure-track faculty members.

The central finding across all three surveys was that a strong majority of all three groups favor changing the calendar so as to conclude fall term exams in December, before the winter break: 72 percent of undergraduates, 76 percent of graduate students, and 63 percent of faculty support this change. In what follows, we discuss additional insights from all three surveys, with particular attention to the findings that are most salient for considering potential revisions to the calendar.

⁹ Both students and faculty were also asked whether or not they would support extended the teaching portion of the term to 13 weeks; no group registered strong support for this idea, and so we do not report those results here for the sake of parsimony.

Undergraduate Students

When asked to reflect on their experiences with the existing academic calendar, students noted that the current structure has created problems for them in several areas, most notably attending a family member's graduation in May and scheduling the start of summer internships while the spring term exam period is still underway. The modal length of internships reported by students was ten weeks long; only 3 percent of responding students reported an internship longer than twelve weeks.

Has the academic calendar ever created	problems for y	you in the following	areas? (checl	(any that apply)
		,		

Answer	Response	%
Scheduling spring term study abroad	207	16%
Scheduling summer study abroad	250	19%
Scheduling courses at other universities during the summer	293	22%
Attending a family member's graduation ceremony in May	674	51%
Starting a summer internship in May	819	62%
Scheduling research travel during the summer	270	20%

Undergraduate students were also asked specifically about how they experience the existing winter break. The responses highlight that the vast majority of students (85 percent) say they feel they must work during the winter break in order to not fall behind, and almost as many say the placement of fall-term exams after the break means that they spend less time with friends and family during their winter holidays.

Question	Disagree	Agree	Total Responses	Mean
I appreciate having the extra time during winter break to study for my fall exams and complete my end-of-term work.	51%	49%	2,605	1
I wouldn't be able to finish my fall term final projects/papers without the winter break.	72%	28%	2,594	1
I enjoy having a winter break before returning to take my finals in January.	67%	33%	2,592	1
Compared to the spring term, I find that it is more difficult for me to recall material on my fall final exams.	45%	55%	2,526	2
My professors assign more work/have higher expectations for end-of-term work in the fall term than in the spring.	47%	53%	2,514	2
I find the fall term final exam period to be more stressful than the spring.	62%	38%	2,497	1

The placement of fall term exams in January allows me to put more effort into my end-of-term work for the fall than in the spring.	48%	52%	2,527	2
Having finals after winter break means that I feel guilty or worry that I will fall behind if I don't work during winter break.	15%	85%	2,601	2
The current placement of finals in January makes me feel stressed over winter break.	19%	81%	2,596	2
Having fall finals in January results in me spending less time with my family and friends during the break.	22%	79%	2,600	2
Having finals after winter break encourages me to procrastinate more than I would if finals were held in late December.	26%	74%	2,592	2

The current system is not without benefits, however – about half of students say they appreciate the extra time to catch up during winter break, and believe this allows them to put more effort into their fall end-of-term work. At the same time, about three-fourths of respondents also admit that holding finals after winter break leads them to procrastinate more than they would if exams were held in December.

All things considered, however, students say they would prefer to have the fall term finals before winter break by nearly a 3-to-1 margin, and only 20 percent of students register disagreement with the prospect of an earlier start to the fall term in order to allow fall-term finals to be placed earlier.

On balance, would you prefer to have fall term finals before winte	r break?
--	----------

Answer	Response	%
Yes	1,850	72%
No	730	28%
Total	2,580	100%

Please indicate your level of agreement with the following statement. I would prefer an earlier start to the school year (August 24-30) in order to have the full reading/finals period before winter break.

Answer	Response	%
Strongly disagree	286	11%
Disagree	225	9%
Neither agree nor disagree	247	9%
Agree	757	29%
Strongly agree	1,089	42%
Total	2,604	100%

Graduate Students

The survey asked graduate students for their feedback on the existing academic calendar – both about their experience with summer research and internship opportunities, as well in their role as Assistants in Instruction (AI). Like their undergraduate counterparts, many graduate students indicated they had faced difficulties in the summer months due to the timing of exams during May, although the average length of internships reported by graduate students was also less than twelve weeks.

Has the academic calendar ever created problems for you in the following areas? (check any that apply)					
Answer		Response	%		
Scheduling spring term study abroad		24	11%		
Scheduling summer study abroad		39	17%		
Scheduling courses at other universities during		35	16%		
the summer		33	10/0		
Attending a family member's graduation		107	48%		
ceremony in May					
Starting a summer internship in May		88	39%		
Scheduling research travel during the summer		106	47%		

When asked specifically about their AI duties, a sizable number of graduate student respondents indicated that their AI commitments resulted in required work over winter break. For instance, 41percent of graduate students say that their AI commitments mean that they end up working over winter break, and 35 percent say that they perform AI duties over intersession. When we factor out those respondents for whom this question was not applicable (the 42 percent of graduate students who said they do not have AI duties in a typical year), a clear majority of graduate students report that their AI duties require them to work during official University break periods.

Question	Disagree	Agree	Not applicable	Total Responses	Mean
My commitments as an AI require me to work over winter break in a typical year	17%	41%	42%	840	2
My commitments as an AI require me to work over intersession in a typical year	23%	35%	42%	839	2
My commitments as an AI would be lessened during winter break if fall finals were held in December	15%	46%	39%	843	2

Like undergraduates, a strong majority of graduate students also registered their support for an earlier start to the fall term in order to schedule fall-term finals before winter break.

On balance, would you prefer to have fall term finals before winter break?

Answer	Response	%
Yes	650	76%
No	203	24%
Total	853	100%

Please indicate your level of agreement with the following statement. I would prefer an earlier start to the school year (August 24-30) in order to have the full reading/finals period before winter break.

Answer	Response	%
Strongly disagree	135	16%
Disagree	107	13%
Neither agree nor disagree	110	13%
Agree	223	26%
Strongly agree	280	33%
Total	855	100%

Faculty

The calendar survey also asked faculty members to register their opinions about potential reforms to the existing calendar, along with the ways that they think the current model serves both them and students. Faculty noted both strengths and weaknesses of the existing calendar structure. On one hand, many faculty (54 percent) agree that the current placement of exams after winter break allows them to place higher expectations upon students in the fall term. At the same time, however, about as many (46 percent) say they think this same arrangement creates challenges for students in retaining course material. About half also say the current structure has created difficulties for them in scheduling research or other travel during January.

In the fall term, the current placement of reading period and finals after winter break (please check all that apply):

Answer	Response	%
Allows me to expect more from students in their end-of-term papers and projects.	234	54%
Leads me to assign more end-of-term work than in my spring term courses.	60	14%
Creates challenges for some students, who experience attenuation of learning and/or have difficulty recalling material after the break.	198	46%
Has made it difficult for me to schedule research or other travel during January.	224	51%

Additionally, we asked faculty to register their agreement or disagreement with a set of observations about the existing calendar and potential changes. While the vast majority (78 percent) would appreciate having time in January that was not diverted to grading and end-of-term business, about half note that an earlier start to the fall term (which would be required to conclude exams in advance of winter break) would create other difficulties.

Question	Disagree	Agree	Total Responses	Mean
Concluding the fall term before winter break (with finals in December) would benefit student learning and retention of course material.	39%	61%	472	2
Holding finals in December would benefit students' mental health.	38%	63%	448	2
Moving finals to December would better discourage students prone to procrastination from leaving so much work to the end of the semester.	33%	67%	467	2
I could make substantial use of uninterrupted time in January without diverting time and attention to end-of-term grading.	22%	78%	479	2
Starting the semester in late August would be challenging for me because K-12 schools are not in session, and this poses child care conflicts.	60%	40%	421	1
An earlier start to the fall semester would be challenging for me because I am accustomed to traveling up to/through the Labor Day holiday.	52%	48%	473	1
An earlier start to the fall semester would be challenging for me because I typically use the time in September before the start of classes to prepare for the start of term and/or work on my own projects.	46%	54%	479	2
I think that students benefit from having a longer period of time (e.g. finals after winter break) to finish end-of-term work in the fall.	54%	46%	453	1

Faculty also recognize the tensions inherent in our existing calendar: Almost half (46%) think that students benefit from having additional time over break to finish their end of term work, while more than 60% agree that concluding the fall term in December would benefit students by improving retention of course material, reducing stress, and discouraging procrastination.

The survey also indicated that faculty are quite busy during January – about threefourths hold office hours with students during this time, two-thirds perform departmental work and other administrative duties, and more than half (54 percent) engage in research and other professional activities during this time when classes are not in session. A clear finding in the free-text responses is that faculty are highly invested in departmental work during January, particularly in graduate student exams and departmental searches. The survey indicated that many departments would be quite concerned about losing this time if the spring term were to start significantly earlier than the current model.

During the	reading and	exam p	eriod (pl	lease check	call that	apply):
During the	reduing und	Cruin p	criou, (pi	cuse encer	cun that	uppiy).

Answer	Resp	onse	%
I encourage students to attend office hours with me or other instructional staff.	3	72	74%
I hold additional class meetings or review sessions.	2	75	55%
I schedule research or other off-campus professional activities that I cannot prioritize during the teaching portion of the semester.	2	71	54%
I perform departmental work and other administrative duties.	3	37	67%
I perform other activities (please explain):	e	52	12%

Finally, faculty also registered strong support for moving finals before the winter break, even if this meant an earlier start to the fall term.

On balance, would	vou support moving	finals before	winter break?
on bulance, would	you support moving		winter break.

Answer		Response	%
Yes		308	63%
No		178	37%
	Total	486	100%

<u>Appendix F:</u> Task Force Members and Charge

The General Education Task Force received the following charge:

The undergraduate curriculum at Princeton is organized around four pillars: the general education course requirements (Gen Ed); electives that allow students to freely explore course offerings; courses taken in the departmental concentration (or major); and independent work in the junior and senior years. These pillars serve distinct yet interconnected purposes: the Gen Ed requirements are intended to "transcend the boundaries of specialization and provide all students with a common language and common skills" (*Undergraduate Announcement*); electives enable students to experiment freely across the disciplines; coursework in the concentration immerses students in the knowledge, methods and practices of a specific discipline; and independent work provides students with the opportunity to conduct original research or to produce a creative work or a project in their chosen field of study under the guidance of a faculty member.

Princeton periodically reviews its policies and curriculum to ensure that they continue to support our mission and respond to changes in the landscape of higher education. Twenty years ago, the Office of the Dean of the College oversaw a review of the general education requirements that resulted in a shift from "definition by discipline" to "definition by ways of looking at and interpreting the world" ("Undergraduate Education Report," 1994). Since then, incremental revisions to these requirements were introduced, most notably, the modifications of the writing and science and technology requirements in 2001 and 2010, respectively. At present, in addition to the writing and foreign language requirements, students are required to take courses in the following areas: epistemology and cognition; ethical thought and moral values; historical analysis; literature and the arts; social analysis; quantitative reasoning; and science and technology. As part of the University-wide strategic planning process, the Task Force on General Education is charged with conducting a self-study to review our goals for an undergraduate education to ensure that our requirements achieve those objectives.

Process

A committee of faculty members and administrators should undertake a review of the curriculum, focusing particularly, although not exclusively, on the Gen Ed requirements. In conducting its work, this committee should consult a variety of sources, such as colleagues in academic departments, benchmarking data from peer institutions, surveys of students and faculty members, focus groups of students and faculty, and secondary literature on developments in general education. Members of this committee should consult periodically and coordinate their work with members of both the Committee on the Course of Study and the Council on Teaching and Learning.

This committee should address the following general questions and recommend reforms consistent with its answers to them:

- What do we want Princeton students to gain from their undergraduate education? What are the fundamental skills, abilities and perspectives that every Princeton student should develop during the course of this education?
- What purposes should Gen Ed requirements serve? Do the current distribution areas appropriately reflect the objectives of a Princeton education?
- How do Princeton's Gen Ed requirements compare to those at peer institutions? What might we learn from their recent curricular reviews?
- To what extent, and how, should Princeton's general education curriculum require students to attain familiarity with foreign cultures or an international perspective? Does the University's current foreign language requirement appropriately support the goals of Princeton's general education curriculum, and how, if at all, should it be modified?
- How should issues of diversity and culture be integrated into the general education curriculum at Princeton? Should we include a "diversity requirement," as the Special Task Force on Diversity, Equity and Inclusion urged in their May 2015 report?
- Given the pervasive importance of computers and computer programming in the modern world, should our general education curriculum incorporate a computer science requirement?
- Do Princeton's course offerings provide students with appropriate opportunities and incentives to achieve the goals of our distribution requirements? Would it be possible to improve the match between our course offerings and those goals? For example, should we offer more large foundational courses and fewer specialized seminars in each category in order to increase the likelihood that students would share a common intellectual experience? Should we alter our advising practices to ensure that students acquire greater breadth and depth in their course of study? Should we modify the processes by which courses that fulfill certain Gen Ed requirements are reviewed and approved?
- How might Gen Ed requirements better prepare students for the process of choosing a concentration and completing independent work? Specifically, should they be used to introduce freshmen to various ways of knowing and to provide sophomores with a more coherent and focused academic experience? If so, when should students be encouraged or required to take the majority of their Gen Ed courses?
- What percentage of students' required coursework should be devoted to the fulfillment of the Gen Ed requirements? Do we allow students adequate opportunities for reflection and intellectual risk?
- What are the implications (if any) of our responses to these questions for the academic calendar?

Chair

Jill Dolan, Dean of the College; Annan Professor in English and Professor of Theatre

Faculty Members

Christina Davis, Professor of Politics and International Affairs

Elizabeth Gavis, Damon B. Pfeiffer Professor in the Life Sciences

Claire Gmachl, Eugene Higgins Professor of Electrical Engineering

Andrea LaPaugh, Professor of Computer Science

Pedro Meira Monteiro, Professor of Spanish and Portuguese

Michael Smith, McCosh Professor of Philosophy; Chair, Department of Philosophy

Michael Strauss, Professor of Astrophysical Sciences; Associate Chair, Department of Astrophysical Sciences

Mark Watson, Howard Harrison and Gabrielle Snyder Beck Professor of Economics and Public Affairs, Woodrow Wilson School.

Staff Members

Anne Caswell-Klein, Dean of Wilson College

Elizabeth Colagiuri, Deputy Dean of the College, Office of the Dean of the College

Rebekah Massengill, Associate Dean of the College, Office of the Dean of the College