7TH COLLEGE – DETAILED ACADEMIC PLAN

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1. The 7th College Theme

The UC San Diego undergraduate college system is characterized by having a unique intellectual theme associated with each college and underpinning the college’s identity. The theme typically informs the basic aspects of the general education program and shapes the character of co-curricular programs. As discussions of the 7th College theme evolved, four criteria emerged:

- The theme must have intellectual depth
- The theme should be sufficiently focused to provide clarity and guidance
- The theme should lend itself to work in multiple disciplines
- The theme should be likely to remain relevant to future generations

The theme “A Changing Planet” meets these criteria. In addition, it clearly aligns with research strengths already articulated in the UC San Diego Strategic Plan’s research theme “Understanding and Protecting the Planet,” and connects deeply with at least two others (“Enhancing Human Life and Society” and “Understanding Cultures and Addressing Disparities in Society”).

The notion “A Changing Planet” has obvious connections to climate change and other environmental issues. However, it can also refer to political and social change as well as changing technologies and artifacts. One area that has gained recent prominence is the movements of people instantiated by various migrations. While these often have been in response to regional conditions, including conflict, violence, and economic hardship, they may, in the future result from environmental changes or be impacted by technological innovation – issues likely to be of sustained relevance. Similarly, changes in technology and society go hand in hand with the advent of increased access to data and social media.

All divisions on campus teach and conduct research in areas that resonate with “A Changing Planet”. The following shows this with respect to the five academic areas every UC San Diego general education program is expected to address; this is intended as illustrative, rather than exhaustive.

Art
UC San Diego has a long tradition of engaging in the intersection of artistic expression and fluctuating conditions at the US-Mexico border. A recent exposition has featured collaboration between SIO and visual arts in the area of climate change. Theater and Dance and Music can examine the evolving expressions associated with migration and globalization.
Humanities
Responses to change in the physical and sociocultural spheres and a suite of accompanying historical, ethical, and literary questions might be addressed from a variety of perspectives in the Humanities.

Social Science
All Social Science departments could address the theme – e.g. migrations, multiculturalism, economics of climate change, impacts on language and culture, urban planning, educational systems, income inequality, and global health.

Natural Sciences
There are clear connections in all areas, including Health Sciences (public health), SIO (climate change), Physical Sciences (physical and chemical processes underlying change), Biological Sciences (ecology and evolution), and Engineering (changing technologies and their interplay with sociocultural institutions).

Quantitative Reasoning
A variety of areas - from statistics to data science - provide quantitative tools that intersect with other areas.

As we discuss below, inter-disciplinary inquiry is central to the 7th College academic plan; the “Changing Planet” theme is relevant, flexible, but also provides focus to this type of work.

2. Academic Plan

UC San Diego’s Academic Senate Educational Policy Committee recommended that, as part of the planning process for 7th College, the campus creatively reimagine general education requirements. To this end, a workgroup was charged with developing a framework for the intellectual focus and academic mission of the college. The workgroup began by looking at innovations and best practices in the field of general education. This included a survey of about a dozen institutions and a review of recent general education literature.

i. Approaches to General Education

General education provides a cornerstone to a liberal arts education. It exposes students to diverse manners of thought and inquiry; it introduces multi-disciplinary content, and provides writing-intensive training. It also provides training in skills that allow for productive careers and engaged citizenship. While, in many cases, the
discipline-specific content of one’s major will be crucial for post-graduate study and careers, a liberal arts education embeds this training in a broader perspective and develops many assets that may be absent from major coursework.

Traditionally, there have been two approaches to general education: required courses or alternatives.

Under the required course approach, students are required to take prescribed courses as at least part of their general education. Four of the six undergraduate colleges at UC San Diego instantiate this approach: the core sequences at Revelle (Humanities), Marshall (Dimensions of Culture), Roosevelt (Making of the Modern World), and Sixth (Culture, Art, and Technology) are taken by all students who enter as first time full-time students; these combine two quarters of intensive writing with specific thematic content, as well as subsequent quarters with specific content. In several cases, the core sequences are closely aligned with the college theme.

The alternatives approach to general education represents a move away from prescribed courses in favor of a designated menu of breadth requirements. Students choose from a variety of options within various categories (e.g. Arts, Humanities, Natural Sciences & Engineering, and Social Sciences). At UC San Diego, all colleges use this approach to some degree. For example, in Muir and Warren, while all students take two prescribed writing intensive courses, these are stand-alone, and not theme-based. The remainder of the general education requirements come from an array of choices offered in the academic departments. Even the four colleges with core sequences employ the alternatives approach to round out their general education requirements, requiring a variety of breadth courses from various departments.

Either approach – prescribed courses or alternatives - provides breadth of academic content. Each approach has its advantages. The core courses often serve to introduce students to the college culture and can result in bonding and a sense of cohort. The alternatives approach allows students to explore outside their initial interests, sometimes leading to a new choice of major.

In addition to breadth of content, general education demonstrates diversity of thought: It provides students with exposure to the different intellectual traditions that make up the academy. This may be even more important than content, as it potentially prepares students to view the world and challenges from diverse points of view.
ii. Structuring General Education

Over the past decade there has emerged a body of literature that emphasizes the need to structure general education in new ways. While diverse modes of inquiry and liberal arts content continue to be important goals, it is also important to structure a program in a way that favors sustained student engagement in general education. To that end, the literature identifies several best practices:

- Interweave general education through the academic career
- Engage students in interdisciplinary work that brings modes of inquiry and content from several areas (including students’ majors)
- Focus on solving difficult problems through capstone (or ‘signature’) projects
- Provide tools for written and oral communication and collaborative projects
- Incorporate high-impact practices, including community-based projects, internships, study abroad, and the like
- Employ inclusive pedagogical practices in recognition of a more diverse student population

iii. Proposed General Education Framework: Alternatives and Synthesis

The framework proposed here brings together required courses and alternatives – much like four of the current six colleges. However, this framework replaces the required core sequence used in the other colleges with a set of three project-based synthesis courses through which students engage with interdisciplinary material – both from their alternatives courses and their majors. In addition, both the alternatives and the synthesis courses are spread out throughout the academic career. This framework assumes 14 courses (some of which may overlap with major coursework). This adheres to the Divisional Academic Senate-approved general education guidelines (see Appendix A).

a. Alternatives [10 courses]

As in many alternatives-oriented general education programs, the diverse modes of inquiry and liberal arts content come from courses taken in academic departments and chosen from a variety of fields – e.g., Arts, Humanities, Social Sciences, Natural Sciences, and Quantitative Reasoning. To ensure intellectual coherence and depth, while retaining sufficient selection to guarantee course availability, these courses will be curated around the college’s intellectual theme. In particular, students will take 10 alternatives courses in the following distribution:
Alternatives - Two courses each from pre-curated selections from:

- Arts
- Humanities
- Social Sciences
- Natural Sciences & Engineering
- Quantitative Reasoning

As is currently the case in other colleges, and allowed by the Academic Senate's general education guidelines, some overlap between alternatives courses and courses taken in the major can effectively reduce the number of alternatives students take beyond other coursework. It is worth emphasizing that this would apply equally for all students, regardless of major, and all students would achieve similar breadth, regardless of whether some of the breadth comes from the major versus general education alternatives. Finally, students are encouraged to take alternatives courses throughout their academic careers – at a rate of 2-3 per year.

A list of examples of courses that may satisfy these alternative requirements in each of the five areas is presented in Appendix C. These courses are curated to align with the “Changing Planet” theme. Thus, while the subject matter and modes of inquiry varies – both within and across categories, the breadth nature of the alternatives courses is anchored to the college theme such that any combination will create a coherent curriculum. Furthermore, these courses form the basis of the interdisciplinary synthesis projects (see below).

While 7th College does not have an explicit foreign language requirement, language classes – at the third quarter level or higher – can be used to satisfy one or two of the humanities selections. Given the importance of language and culture in societal change, this is closely aligned with the college theme. Language study also prepares students for study abroad (see High Impact Course requirement, below).

b. Synthesis Courses [3 courses]

Synthesis courses bring together modes of thought and content from both alternatives courses and other coursework, including major courses, the campus-wide Diversity, Equity, and Inclusion (DEI) requirement, and electives. These courses focus on interdisciplinary approaches to complex problems. They will provide a mix of individual and group work that entails significant writing and oral presentations. Students will be required to bring modes and content from their general education classes, DEI course, and major coursework. Students are required to take three synthesis courses: two lower-division writing-intensive courses (Synthesis 1-2, taken in the first and second
year, respectively) and one upper-division course that all students take in either their junior or senior years (Synthesis 100). The lower division courses will provide an introduction to interdisciplinary inquiry. The upper-division course is project-based, and may include elements of design, community-based work, and group projects. Synthesis 100 courses are led by faculty from a variety of backgrounds and in addition to emphasizing inter-disciplinary work, will be presented with a variety of research methodologies. Hence, a student might choose a course that emphasizes film production, while another might select a field methods course. The offerings vary quarter to quarter. Regardless, the theme of each course will involve collaborative, interdisciplinary work that confronts difficult problems. This structure is designed to accomplish all of the best practices detailed above. Finally, because these are organized according to entering years, the synthesis courses help form a feeling of shared experience and cohort.

A more detailed structure for the synthesis courses is presented in Appendix D. The guiding principle is to require students to engage in material they have studied in their alternatives and other courses. This is the glue that binds the general education framework and helps keep the alternatives connected and relevant within the student’s overall academic pathway. Putting together both the curated alternatives and the synthesis courses, the general education framework is designed to form a coherent liberal arts general education that has advantages of both required courses and alternatives.

c. High Impact Course [1 course]

To round out the general education curriculum – ten alternatives and three synthesis courses – a final, high impact course will allow students to pursue their interests, selecting from a variety of high impact educational venues, e.g., a departmental capstone, internship, practicum, mentored research, or study abroad. Thus, while the three synthesis courses engage major and other coursework, the high-impact course allows for experiential work in the major or in other areas.

d. Writing and Design

Each of the current six colleges requires two writing intensive courses. These are either stand-alone (Muir and Warren) or embedded in the core sequences. Similarly, 7th College’s lower-division synthesis courses include an intensive writing curriculum. The writing assignments will include interdisciplinary projects that emphasize writing both within and across disciplines. The upper-division synthesis course focuses on collaborative projects and culminates in research presentations.
7th College presents an opportunity to leverage UC San Diego’s Design Lab, which already offers courses and minors for undergraduates, by incorporating a broadly-conceived design component into the general education program. The college’s curriculum approaches design as a holistic, interdisciplinary and collaborative process that hinges on iteration, testing, feedback, and learning in the process of making. While design is often associated with commodities like furniture or technological systems, the emphasis here is to teach students iterative, holistic methods for producing a wider range of humanistic interventions, including writing, film, and policy. Indeed, design offers a process for tackling the very interdisciplinary complex problems that we want students to attain experience in addressing.

This notion of design will challenge students to draw on their alternatives coursework in making sense of complex problems, and learning how to engage communities to make imagined futures that can exist in the social dynamics of a global world.

Writing, then, has two modes in this approach to general education. One mode is writing to think, synthesize, reflect, and critique. In the second, design-oriented mode, writing produces textual and multimodal artifacts to circulate and produce effects on reader-users, whether investigative journalism, scientific reports, or presentations. The former mode is prevalent in the first two, writing-intensive synthesis courses, while the upper-division synthesis course will be more design-oriented, providing a vehicle for students to engage in complex, interdisciplinary problem solving with wider communities and public.

iv. Co-curricular Experiences

A particular strength of the UC San Diego college system is the way academic and student affairs combine in relatively small learning communities. The student affairs staff fosters growth by promoting co-curricular activities that include student government, organizations, leadership opportunities, and cultural events. A number of these typically draw inspiration from the college theme. UC San Diego has instituted the Co-Curricular Record, which allows students to document many of these activities. Recognizing that student development and growth happens both within and outside of academic programs, the college will provide staff dedicated to this important aspect of the college experience.
v. Equity, Diversity, and inclusion

UC San Diego continues to work to create a campus environment that all students will experience as equitable, diverse, and inclusive. The six undergraduate colleges have been collaborating with other campus units in several significant efforts promoting equity, diversity, and inclusion; for example:

- Resident Assistants undergo equity-minded training.
- Colleges partner with Student Affairs in the Student Success Coaching Program and in advising Chancellor’s Associates Scholars (the latter is a scholarship program designed to increase diversity and access).
- Several of the colleges host identity-based living and learning communities
- All of the colleges contribute to the Summer Bridge Program.
- Colleges regularly sponsor multi-cultural events.
- While not specific to the College’s curriculum, all students are required to take a course that addresses topics related to diversity, equity, and inclusion.

7th College will similarly make equity, diversity, and inclusion a significant priority. The alternatives and synthesis courses framework lends itself particularly well to academic explorations of issues pertaining to diverse cultures, inequities, and societal challenges in the face of a changing planet.

vi. Campus Partners

7th College will collaborate with a wide range of departments, programs, research units, and others to implement its curriculum and engage its students in UC San Diego’s exciting intellectual milieu. Departments already offer a number of relevant courses and, in some cases, have committed to create new courses that align with the college theme. Furthermore, there is interest in collaboration with the Qualcomm Institute, the Design Lab, the Institute of Arts and Humanities, and SIO in creating and staffing synthesis courses. Letters from potential campus partners are included in Appendix I.

3. Summary of 7th College Graduation Requirements

This section briefly states 7th College’s graduation requirements in the format of the Academic Senate Regulations for the other six colleges. Detailed information is provided in the appendices.
A. Degrees

7th College will recommend candidates for the degree of Bachelor Arts or Bachelor of Science, with designation as to major. Double majors will be permitted, consonant with regulations of the Educational Policy Committee (EPC).

B. General Education Requirements

See Appendices A and B.

C. Additional Graduation Requirements

1. The minimum requirement for graduation with the degrees of Bachelor of Arts or Bachelor of Science will be completion of 180 units with a cumulative grade point average of 2.0 (C) or higher. At least 60 of these units must be completed at the upper-division level.

2. At least nine of the last eleven courses passed (or 36 of the last 44 units passed) must be taken as a 7th College student.

3. A departmental or interdisciplinary major must be completed.

4. Transfer Students

The Alternatives and Synthesis framework is structured around a four-year college experience – it assumes students enter as first time full-time students and stay in the college for four years. However, approximately one-third of our undergraduates enter UC San Diego as transfer students – either from community colleges or other four-year institutions. Transfer students often complete a program of study – Intersegmental General Education Transfer Curriculum (IGETC) – that allows them to complete most general education requirements at a California community college. We propose that transfer students who have completed IGETC use the experience from their previous institution to cover the alternatives portion of general education and take the one upper-division synthesis course and the high-impact course at UC San Diego.

A related question arises when considering whether some alternatives might be waived based on AP (or IB/A-Level) credit. The current six colleges differ in their approaches – often allowing students to skip the first course in some sequences based on AP scores. We leave this question to the implementation stage where a faculty committee will
determine which lower-division alternatives might be impacted and how the coherence of the synthesis sequences will be preserved.

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Emily Roxworthy, Provost, Warren College
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Jane Teranes, Lecturer, Scripps Institution of Oceanography
Kyler Vaughn, Undergraduate Student
Appendix A - Conformity to Academic Senate Regulations for College General Education Requirements

The following summarizes the Divisional Academic Senate’s approved general education guidelines:

**Guidelines for College General Education Requirements**

<table>
<thead>
<tr>
<th>Requirement:</th>
<th>BA/BS in Arts and Sciences</th>
<th>BS in Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Number of Courses for a college’s general education (GE) requirement</td>
<td>At least 14 4-unit courses</td>
<td>At least 12 4 –unit courses</td>
</tr>
<tr>
<td>Limit on Overlapping Courses with a Major</td>
<td>At least 11 GE courses</td>
<td>At least 9 GE outside the requirements specified by student’s major</td>
</tr>
<tr>
<td>Breadth Requirement</td>
<td>• At least 11 of the 14 GE courses must be taken from a minimum of four departments or programs.</td>
<td>• At least 9 of the 12 GE courses must be taken from a minimum of four departments or programs.</td>
</tr>
<tr>
<td></td>
<td>• Courses required by the student’s major will not count toward the breadth requirement</td>
<td>• Courses required by the student’s major will not count toward the breadth requirement</td>
</tr>
<tr>
<td></td>
<td>• Writing program sequence will count as one area outside the student’s major</td>
<td>• Writing program sequence will count as one area outside the student’s major</td>
</tr>
</tbody>
</table>
to fulfill this requirement

- Must require graduates to meet minimal requirements in Humanities/Fine Arts, Social Sciences, and Mathematics/Natural Sciences

to fulfill this requirement

- Must require graduates to meet minimal requirements in Humanities/Fine Arts, Social Sciences, and Mathematics/Natural Sciences

<table>
<thead>
<tr>
<th>Writing Requirement</th>
<th>At least 5 courses (including GE and courses in the major) must require writing a paper or papers.</th>
<th>At least 5 courses (including GE and courses in the major) must require writing a paper or papers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Requirements</td>
<td>Optional: Specify more than these minimum requirements and/or require certain course sequences or course distributions, as long as they are consistent with the above four requirements</td>
<td>Optional: Specify more than these minimum requirements and/or require certain course sequences or course distributions, as long as they are consistent with the above four requirements</td>
</tr>
</tbody>
</table>

The proposed academic plan meets these guidelines as follows:

i. Minimum number of courses:

Ten alternatives, three synthesis courses (two lower-division and one upper-division), and one high-impact course = 14 courses.

ii. Limit on overlapping:

At most three courses can overlap with major courses. That is, three courses taken to fulfill major requirements may be used to also satisfy alternatives requirements. These courses do not need to be in the list of approved alternatives courses, but each should be in one of the five alternatives areas.
iii. Breadth requirement:

- Because the alternatives courses must cover five areas (Arts, Humanities, Natural Sciences & Engineering, Social Sciences, and Quantificational Reasoning), they will be necessarily in at least four departments or programs.
- Aside from the permitted three-course overlap, major requirements will not count towards breadth requirements (alternatives).
- The synthesis courses will be housed in the college and outside the major.
- Humanities/Fine Arts, Social Sciences, and Mathematics/Natural Sciences are all represented in the alternatives requirements.

iv. Writing requirement

The two lower-division synthesis courses will include writing papers. Three of the alternative courses or course work in the student’s major must include significant writing. The Provost's Office will maintain an updated list of courses taught across the curriculum that include an appropriate amount of writing.

v. College requirements

Two courses are required from each of the following areas: Arts, Humanities, Natural Sciences & Engineering, Social Sciences, and Quantificational Reasoning. Students must complete two lower-division synthesis courses, one upper-division synthesis course, and one high-impact course.
## Appendix B: 7th College General Education Requirements - Summary

<table>
<thead>
<tr>
<th>Alternatives</th>
<th># Units per course</th>
<th>Units</th>
<th># Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>4-4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Humanities(^1)</td>
<td>4-4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Natural Sciences &amp; Engineering</td>
<td>4-4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>4-4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Quantitative reasoning</td>
<td>4-4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td><strong>Alternatives Subtotal</strong></td>
<td></td>
<td><strong>40</strong></td>
<td><strong>10</strong></td>
</tr>
<tr>
<td>Synthesis 1-2</td>
<td>4-4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Synthesis 100</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td><strong>High-Impact Course</strong></td>
<td>2-4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td><strong>General Education Total</strong></td>
<td></td>
<td><strong>56</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

\(^1\) Foreign language courses (third quarter or beyond) may apply to the Humanities alternatives; some of these may be 5 units.
Appendix C: 7th College Alternatives – Examples

The following are examples of courses that may satisfy the Alternatives requirements in each of the five categories. A final curated list will be developed by the 7th College Academic Plan Workgroup and submitted to Undergraduate Council for approval. Note that some of the proposed alternatives courses are being proposed by units to serve the specific needs of 7th College students. The courses are generally chosen based on alignment with the college theme, although some of the courses are more foundational (e.g. those in quantitative reasoning).

i. Arts

MUS 13    Worlds of Music
TDGE 12    Topics in Cinema and Race
TDGE 134   Disability and Performative Exploration: Struggle for Inclusion

ii. Humanities

HILD 7A-C   Race and Ethnicity in the United States
HILD 7GS    Race and Ethnicity in the Global World
HILD 30     History of Public Health
HILD XXX    Global Environmental History (new course)
HINE 145    Islam and Science: The History of Science in the Middle East (600-1950)
HISC 106    The Scientific Revolution
HIUS 143    The Built Environment in the Twentieth Century
LTCS 102    Practicing Cultural Studies
LTCS 125    Cultural Perspectives on Immigration and Citizenship
LTCS 133    Globalization and Culture
LTCS 134    Culture and Revolution
LTCS 155    Health, Illness, and Global Culture
PHIL 26     Science, Society, and Values
PHIL 27     Ethics and Society
PHIL 32     Philosophy and the Rise of Modern Science
PHIL 148    Philosophy and the Environment

In addition, foreign language courses - from third-quarter level or beyond – may be used to satisfy Humanities alternatives, regardless of the home division (e.g. Linguistics, Literature, or the Institute of Arts and Humanities).
iii. Natural Sciences & Engineering
COGS 10  Cognitive Consequences of Technology
PHYS 8    Physics of Everyday Life
PHYS 12   Energy and the Environment
SIO 10    The Earth
SIO 12    History of the Earth and Evolution
SIO 25    Climate Change and Society
SIO 117   The Physical Basis of Global Warming

iv. Social Sciences
ANTH 21   Race and Racisms
COGS 102B Cognitive Ethnography
COMM 103E History of Electronic Media
COMM 111C Communication and Cultural Production: Cities and Space
EDS 117   Language, Culture, and Education
EDS 135   Working with Newcomer Communities in San Diego
ETHN 3    Introduction to Ethnic Studies: Making Culture
ETHN 103   Environmental Racism
ETHN 117   Organic Social Movements
ETHN 118   Contemporary Immigration Issues
GLBH 20   Introduction to Global Health
HMNR 100   Human Rights I: Introduction to Human Rights and Global Justice
LIGN 8    Languages and Cultures in America
SOCI 20   Social Change in the Modern World
SOCI 125   Sociology of Immigration
SOCI 137   Sociology of Food
SOCI 149   Sociology of the Environment
SOCI 179   Social Change
USP 1     History of US Urban Communities
USP 106   The History of Race and Ethnicity in American Cities

v. Quantitative Reasoning
COGS 14B   Introduction to Statistical Analysis
COGS 18    Introduction to Python
DSC 10    Principles of Data Science
ECON 5     Data Analytics for the Social Sciences
LIGN 17    Making and Breaking Codes
MATH 11    Calculus-Based Introductory Probability and Statistics
MATH 18    Linear Algebra
Appendix D: Synthesis Courses

The synthesis courses – both the lower-division interdisciplinary inquiry and the upper-division project-based courses – provide an opportunity for students to engage with material from alternatives, Diversity, Equity, and Inclusion, and major coursework in the context of interdisciplinary projects. Enrollment projections suggest the need for approximately 20 synthesis courses per year (10 lower-division and 10 upper-division – see Appendix G). Each course might have an enrollment of approximately 133 students. These courses would consist of smaller courses taught by graduate teaching assistants or associate-ins, combined with a larger, co-requisite lecture, taught by senate faculty or Unit 18 lecturers. The synthesis courses are divided into two categories – the lower-division, writing-intensive courses, designed to introduce students to interdisciplinary work, and an upper-division course, offering the opportunity to synthesize earlier work in a project-oriented course.

i. Lower-Division Synthesis: Interdisciplinary Inquiry

Lower-division students will take two 4-unit courses, one in each of the first two years, that will be offered uniquely and exclusively to 7th College students. These courses will function as a common core insofar as they will provide a shared experience that will help create an intellectual community among the students of the college. However, these courses will vary widely in content based on the preferences and interests of available and interested faculty. In each of those courses, the instructor will introduce students to a subject related to the greater theme of “A Changing Planet” while modeling interdisciplinary thinking – that is, by bringing together different areas of expertise and different skill sets that inform and propel their engagement with the topic. These courses will introduce students to the kinds of questions, methods, challenges and rewards of working across disciplines, and will give them (through course assignments) an opportunity to engage in interdisciplinary thinking on a small scale by themselves. These initial experimentations with interdisciplinary work are expected to come to a fuller fruition in the upper-division synthesis course that students will take in their third or fourth year.

These lower-division synthesis courses will be writing-intensive and will put significant emphasis on the development of academic composition skills: structure, style, coherence, argumentation, working with and citing from secondary sources, etc. The primary setting for developing those skills will be the graduate student-led courses that are co-requisite with the larger lecture.
These two courses will form a sequence: Synthesis 1 and Synthesis 2. The first course will emphasize critical reading and argumentation in the context of the course topic and interdisciplinary inquiry. A series of writing assignments will culminate in a final paper that demonstrates academic argumentation that takes into account the different perspectives discussed in the lectures. The second synthesis course will build on the skills developed in Synthesis 1 and will introduce research methods, culminating in an interdisciplinary research paper that the student designs around areas addressed in other coursework (e.g. alternatives and major coursework). Since a goal of these courses is to give students a broad range of experiences with different kinds of interdisciplinary work, students will take the two lower-division synthesis courses from different instructors and will be exposed to different topics (but all aligned with the greater theme of “A Changing Planet”). While lower-division students will have completed relatively fewer alternatives courses (particularly during the first year), multiple offerings of these synthesis courses will offer the possibility of aligning topics from alternatives courses and the interdisciplinary inquiry introductions.

Because much of the writing and project mentoring will be done in smaller the graduate student-led courses, graduate student instructors will receive training in writing pedagogy (as is the current practice in the other college writing programs).

By not determining in advance what the content of these courses, and by allowing each instructor to develop their own syllabus, 7th College will be able to both guarantee a reliably robust selection of courses each year (which will accommodate both students’ schedules and student interests) and to ensure that the instructors are motivated, and committed to the course. However, all courses will meet the following criteria:

a. Engage with the theme of “A Changing Planet” in a meaningful way  
b. Demonstrate interdisciplinarity (in the materials used, methods of inquiry applied, areas of interest that inform each other, etc.)  
c. Propose significant and sustained opportunities for writing

**Two examples for possible Directions of Interdisciplinary Inquiry courses:**

The examples below do not describe courses that have already been proposed and approved for 7th College. Rather, they serve to demonstrate how a single course can incorporate perspectives from multiple disciplines in presenting a compelling and coherent picture of a topic. Note also that each of these can be designed around the different technical goals of Synthesis 1 and Synthesis 2.
Example 1: Climate, Disease, and the End of the Roman Empire

Interweaving a historical narrative with climate science and genetic discoveries, this course traces how the fate of Rome was decided not just by emperors, soldiers, and barbarians but also by volcanic eruptions, solar cycles, climate instability, and devastating viruses and bacteria. The empire’s very strength, built on travel, trade, and migration, also enabled the spread of tuberculosis, leprosy, smallpox, plague, and other diseases. The climate played a large part in the expansion of the empire, especially agriculturally, but the close proximity of humans and animals brought new parasites and diseases. Furthermore, the high level and density of urbanization in over 1,000 cities facilitated the widespread transmission of germs. The empire survived a pandemic in the age of Marcus Aurelius, then a mix of drought, pestilence, and political upheaval called the “Crisis of the Third Century,” or the first fall of Rome, beginning in the 230s. The course will cover the 2nd through the 7th centuries with special emphasis on the interweaving of politics, environment, economics, and religion.


Example 2: Hawai‘i: People, Land, and Food

Offering diverse perspectives on Hawai‘i’s food system, this course addresses themes of place and identity across time. From early Western contact to the present day, the way in which people in Hawai‘i grow, import, and consume their food has shifted in response to the pressures of colonialism, migration, new technologies, and globalization. Because of Hawai‘i’s history of agricultural abundance, its geographic isolation in the Pacific Ocean, and its heavy reliance on imported foods today, it serves as an interesting case study for how food systems develop in particular places. With topics spanning GMO activism, agricultural land use trends, fishing rights, poi production, and the dairy industry, this course examines the relations between food, society, and environmental change.

(Description based on Hi‘ilei Hobart’s book *The Foodways of Hawai‘i*, Routledge, 2018)

Learning Outcomes:

- **Written Communication**
  - Identify, evaluate, and develop claims and arguments, evaluate sources, and be able to write an academic research paper

- **Oral Communication**
  - Ability to discuss readings and progress in their writing both in regular discussion in small workshop contexts
- Information Literacy
  - Ability to use library and internet tools to identify academic sources, to document those sources in an annotated bibliography, and to evaluate the worth of those resources
- Critical Thinking & Problem Solving
  - Basic mastery inductive reasoning, critical thinking, and argumentation, using multi-disciplinary sources
- Research Ability
  - Ability to conduct a medium-scale research project

ii. Upper-Division Synthesis Course

The upper division synthesis course – Synthesis 100 – builds on work from Synthesis 1-2, as well as alternatives, major, and other coursework. This course puts this previous work into practice around a general topic in the form of group projects. A possible model for such courses is Bending the Curve – named for a multi-campus UC course on climate change solutions, developed by Fonna Forman (Political Science) and V. Ramanathan (SIO). This course is centered around the idea that the students’ project work would be changing conditions to result in a better outcome to a problem, resulting in the “curve” of conditions over time being “bent” towards a more positive outcome. This expression is used in business and is becoming more common in climate change policy, international sustainability goals, health care, among other areas. This upper-division course will be offered in different versions, from which students could choose. Different instantiations of the course will be based around different topics (aligned with the college theme) and offered with several possible project modes. Examples of possible topics and modes are as follows:

Possible Topics:
- Climate Action
- Reducing Inequalities
- Social Migrations
- Preserving Biodiversity
- Changing Technology
- Artistic Expressions
- Urbanization

Possible Modes:
- Design projects
- Community projects
- Research projects
- Video or Film projects
In any given quarter there would be multiple selections for students to choose from which will combine a topic and mode, according to faculty interest.

This course may be structured as a partially flipped course, where class time is discussion-heavy, with preparatory videos and/or readings. Short video lectures might be produced by expert faculty who complement the expertise of the instructor. Alternatively, guest lecturers may provide interdisciplinary content. These videos and lectures combine with key readings to serve as the subject content around the topic.

Class lecture time serves the following two purposes: (i) extensive class discussion on the content lectures and readings, and (ii) lectures on the tools of the project area (i.e. the tools of the course mode).

In lieu of discussion sections, the larger lecture course would be broken into several small, co-requisite, courses led by teaching assistants or associate-ins from a variety of disciplines (and aligned with the topic and mode). These represent the workspace for students to choose their project ideas and engage with their other group members. The instructors help students identify and refine group projects over the quarter and determine personal contribution by assigning roles to each member. This is where students bring in their own backgrounds and interests, and where the content from the lower division courses and the alternatives comes into play.

The final projects will vary based on the course topic and mode; they might include community events, data collection and analysis, a design project, a poster/conference presentation, a film, or artwork. The products will be shared with the other students and presented to a wider audience in a college-themed event, inviting participants such as faculty, community leaders, industry members, and others. UC San Diego’s Design Lab can be involved in aiding students as they create deliverables and content for their projects. Final projects would also include a written report, allowing for publication of especially successful projects.

The upper-division synthesis course will also introduce elements of design-oriented investigation and writing, where students produce textual and multimodal artifacts, including investigative journalism, scientific reports, and presentations. These courses, therefore, allow students to engage in complex, interdisciplinary problem solving with wider communities. The design element will be common to all instantiations of Synthesis 100, as all will tackle difficult problems and use design thinking to develop solutions. Some may be more fully design oriented than others (see below).

Two examples for possible upper-division synthesis courses:

Again, the course content for Synthesis 100 will vary according to topic and mode. This allows faculty to build the course around their own areas of expertise, while
incorporating interdisciplinary content (perhaps in the form of videos, readings, and/or guest lectures). The following outlines two illustrative examples:

**Example 1: Bending the Curve: Climate Change Solutions**

**Topic:** Climate change solutions  
**Mode:** Interdisciplinary approach to complex problems; written group project

This course will focus on scalable solutions for carbon neutrality and climate stability across different disciplines—Science, Technology, Governance, Social Sciences, Economics, and Ecosystem. It leverages expertise across the UC system to showcase how mitigating climate change is relatable in every discipline and challenges students to lead this change. Students will learn examples of projects actively “bending the curve” of climate change on a local and international scale, and will have the opportunity to plan and execute a project of their own. … This course will require students to review lecture material and complete readings at home prior to class. Class time will focus on in-class discussions of the concept and the questions in the lecture notes as well as group project work. Interdisciplinary discussions will take place both online and in-person, with groups encompassing students from at least 3 different disciplines.  
*(From POLI 117/SIO 109 Spring 2017 syllabus)*

**Example 2: Designing Immigration Policy**

**Topic:** Immigration  
**Mode:** Design

This course will delve deeply into design skills and practices in the context of crafting immigration policy. In particular, the course explores how the design literature can provide a perspective that allows the difficult problem of immigration policy to be addressed through policy construction. Topics include building on the “Engineering Experience,” identifying problems, prototype policy, scaling and scoping, and anticipating unintended consequences. The course will engage the social science literature on immigration and migration, in particular, economic, cultural, demographic, and political impacts of immigration, as well as laws and government policies for controlling immigration and refugee flows. These aspects of immigration, as well as the associated policies will be examined through a design lens. Group work will culminate in presentations and a co-authored white paper on immigration policy.

**Learning Outcomes:**

- **Written Communication**  
  - Identify, evaluate, and develop claims and arguments, evaluate sources, and be able to write an academic research paper
• Oral Communication
  o Ability to discuss readings and progress in their writing both in regular
discussion in small workshop contexts

• Information Literacy
  o Ability to use library and internet tools to identify academic sources, to
document those sources in an annotated bibliography, and to evaluate the
worth of those resources

• Critical Thinking
  o Basic mastery inductive reasoning, critical thinking, and argumentation,
using multi-disciplinary sources

• Design Thinking
  o Understanding of the design process: iteration, testing, feedback, and
learning in the process of making

• Research Ability
  o Ability to conduct a medium-scale research project

• Teamwork & Cross Cultural Collaboration
  o Conduct group project in diverse teams

• Understanding Global Context
  o Situate problem in a real-world context

• Civic Engagement and Social Responsibility
  o Address civic/social dimensions of problem
Appendix E: High-Impact Course

Literature on general education notes the value of several high-impact experiential learning opportunities. This last requirement ensures that students avail themselves of at least one of these impactful experiences. While the synthesis courses promote interdisciplinary inquiry, the high-impact course is less constrained. It could, for example, involve research and/or projects in the student’s major area of study. The college will monitor and curate a range of high-impact experiential learning opportunities for this requirement, which include:

- Major-based capstone or project courses
- Mentored research
- Internships
- Study abroad
Appendix F: Projected Sample Programs

The following summarizes the 7th College general education curricula for incoming first time full-time students and transfer students.

**Incoming first-time full-time students**

Alternatives - Two courses each from pre-curated selections from:
- Arts
- Humanities
- Social Sciences
- Natural Sciences & Engineering
- Quantitative Reasoning

Synthesis – two lower-division and one upper-division
One high-impact course

Year 1: 2-3 alternatives, Synthesis 1
Year 2: 2-3 alternatives, Synthesis 2
Year 3 and 4: remaining 4-6 alternatives, Synthesis 100, one high-impact course

**Incoming transfer students**

Alternatives – completed through IGETC; otherwise by petition or taken at UC San Diego
Synthesis – Synthesis 100
One high-impact course

Years 1-2: alternatives, as needed, Synthesis 100, one high-impact course

Four-year completion plans are available for all majors and colleges. To test the feasibility of the proposed framework, a mock 7th College was set up, allowing testing of various majors. The following is a sample four-year plan for the General Linguistics major:
Linguistics – Four-Year Plan (180 total units):

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall (units)</th>
<th>Winter (units)</th>
<th>Spring (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Language Req. (5)</td>
<td>Language Req. (5)</td>
<td>Language Req. (5)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td>GE Alternative (4)</td>
<td>Elective (4)</td>
</tr>
<tr>
<td></td>
<td>Elective (4)</td>
<td>Elective (4)</td>
<td>Synthesis 1 (4)</td>
</tr>
<tr>
<td>2</td>
<td>Language Req. (5)</td>
<td>LIGN Elective (4)</td>
<td>LIGN Elective (4)</td>
</tr>
<tr>
<td></td>
<td>LIGN 101 (4)</td>
<td>GE Alternative (4)</td>
<td>Elective (4)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td>Elective (4)</td>
<td>Elective (4)</td>
</tr>
<tr>
<td>3</td>
<td>LIGN Elective (4)</td>
<td>LIGN 111 (4)</td>
<td>LIGN 120 (4)</td>
</tr>
<tr>
<td></td>
<td>LIGN 110 (4)</td>
<td>GE Alternative (4)</td>
<td>LIGN Elective (4)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative/DEI (4)</td>
<td>Elective (4)</td>
<td>Synthesis 100 (4)</td>
</tr>
<tr>
<td></td>
<td>Elective (4)</td>
<td>Elective (4)</td>
<td>Elective (4)</td>
</tr>
<tr>
<td>4</td>
<td>LIGN Elective (4)</td>
<td>LIGN 121 (4)</td>
<td>LIGN 130 (4)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td>GE Alternative (4)</td>
<td>LIGN Elective (4)</td>
</tr>
<tr>
<td></td>
<td>Elective (4)</td>
<td>Elective (4)</td>
<td>High Impact (4)</td>
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<tr>
<td></td>
<td>Elective (4)</td>
<td>Elective (4)</td>
<td>Elective (4)</td>
</tr>
</tbody>
</table>

This demonstrates that a major like Linguistics, with the minimum of 48 upper-division units (and relatively few lower-division requirements), can easily accommodate the 7th College general education requirements, with room for both major requirements and a significant number of electives (which could be used for a minor or towards a double major).

On the other extreme, Bioengineering has significant lower-division and upper-division requirements (the most of all majors). By allowing overlap between major requirements and GE alternatives in quantitative and natural science areas, these students would take only eight separate GE alternative courses (one of which could overlap with the campus DEI requirement), Synthesis 1-2, and Synthesis 100. Note that the high-impact course is satisfied through the major’s 187 series (Bioengineering Project – four 1-unit courses); combined with overlap between the major and two alternatives, leaves 11 general education courses disjoint from the major.
Bioengineering – Four-Year Plan (196 total units):

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall (16 units)</th>
<th>Winter (14 units)</th>
<th>Spring (18 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATH 20A (4)</td>
<td>PHYS 2A (4)</td>
<td>BILD 1 (4)</td>
</tr>
<tr>
<td></td>
<td>CHEM 6A (4)</td>
<td>MATH 20B (4)</td>
<td>PHYS 2B (4)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td>CHEM 6B (4)</td>
<td>PHYS 2BL (2)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td>BENG 1 (2)</td>
<td>MATH 20C</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td></td>
<td>Synthesis 1 (4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall (18 units)</th>
<th>Winter (16 units)</th>
<th>Spring (20 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 7L (4)</td>
<td>MAE 8 (4)</td>
<td>MATH 20E (4)</td>
</tr>
<tr>
<td></td>
<td>PHYS 2C (4)</td>
<td>MAE 140 (4)</td>
<td>BENG 140B (4)</td>
</tr>
<tr>
<td></td>
<td>PHYS 2CL (4)</td>
<td>BENG 140A (4)</td>
<td>MAE 3 (4)</td>
</tr>
<tr>
<td></td>
<td>MATH 20D (4)</td>
<td>MATH 18 (4)</td>
<td>BENG 100 (4)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative/DEI (4)</td>
<td></td>
<td>Synthesis 2 (4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall (16 units)</th>
<th>Winter (16 units)</th>
<th>Spring (17 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAE 107 (4)</td>
<td>BENG 186B (4)</td>
<td>BENG 172 (4)</td>
</tr>
<tr>
<td></td>
<td>BENG 110 (4)</td>
<td>BENG 112A (4)</td>
<td>BENG 112B (4)</td>
</tr>
<tr>
<td></td>
<td>MAE 170 (4)</td>
<td>BENG 130 (4)</td>
<td>BENG 103B (4)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td>Synthesis 100 (4)</td>
<td>BENG 187A (1)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td></td>
<td>GE Alternative (4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall (16 units)</th>
<th>Winter (16 units)</th>
<th>Spring (13 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BENG 122A (4)</td>
<td>Tech Elective (4)</td>
<td>Tech Elective (4)</td>
</tr>
<tr>
<td></td>
<td>MAE 150 (4)</td>
<td>BENG DE (3)</td>
<td>BENG 125 (4)</td>
</tr>
<tr>
<td></td>
<td>BENG DE (3)</td>
<td>BENG 187C (1)</td>
<td>BENG 186A (4)</td>
</tr>
<tr>
<td></td>
<td>BENG 187B (1)</td>
<td>GE Alternative (4)</td>
<td>BENG 187D (1)</td>
</tr>
<tr>
<td></td>
<td>GE Alternative (4)</td>
<td>GE Alternative (4)</td>
<td>GE Alternative (4)</td>
</tr>
</tbody>
</table>

Due to greater required lower- and upper-division units, it is a more challenging plan to finish the Bioengineering major in four years. There are four quarters with more than 16 units (18, 18, 20, and 17). However, if we compare this with other colleges, we find that the same major is, overall, similarly challenging; indeed, 7th College is on par with Muir and Marshall in both total units and number of high-unit quarters.
Four-year plans have been developed for all majors (https://goo.gl/dmYsd8, pdf files arranged by major code). These plans assume an overlap of two alternatives for non-STEM majors and three for STEM majors (because the latter typically have lower division requirements that count towards both quantitative reasoning and natural science & engineering areas). Some majors have required courses that satisfy the high impact requirement – these are mentioned in the plan’s college notes. Other courses may also satisfy this requirement; again, the college will keep track of a full range of high impact courses.

A comparison of the four year plans across all departments and programs is given in https://goo.gl/dmYsd8 (Four Year Plan Data.xlsx). This chart shows the total number of units required to meet both the major and GE requirements, as well as the number of quarters where the plan requires more than 16 units. These data are presented by department or program; the numbers are averaged in cases where there are more than one major in a unit. For most majors, the major/GE unit total comes to fewer than 180 units; this is reflected in the individual plans, but listed as 180 in the comparison chart. In order to meet the 180 unit graduation requirement, students in these majors will take electives and could possibly include minors or second majors.

Only seven departments have 7th College four-year plan averaging units greater than 180; as seen below, 7th College generally compares favorably with the other colleges according to this measure:

<table>
<thead>
<tr>
<th>Dept</th>
<th>Revelle</th>
<th>Muir</th>
<th>TMC</th>
<th>Warr</th>
<th>ERC</th>
<th>6th</th>
<th>7th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioengineering</td>
<td>204.5</td>
<td>191.5</td>
<td>192.5</td>
<td>187.5</td>
<td>203.5</td>
<td>194.5</td>
<td>190.5</td>
</tr>
<tr>
<td>Chemical Eng</td>
<td>199</td>
<td>183</td>
<td>187</td>
<td>183</td>
<td>195</td>
<td>183</td>
<td>183</td>
</tr>
<tr>
<td>ECE</td>
<td>202.5</td>
<td>185.5</td>
<td>190.5</td>
<td>188.5</td>
<td>197.5</td>
<td>184.5</td>
<td>185.5</td>
</tr>
<tr>
<td>MAE</td>
<td>204</td>
<td>188</td>
<td>192</td>
<td>184</td>
<td>202</td>
<td>189.33</td>
<td>188</td>
</tr>
<tr>
<td>Nano</td>
<td>193</td>
<td>181</td>
<td>181</td>
<td>181</td>
<td>193</td>
<td>185</td>
<td>181</td>
</tr>
<tr>
<td>Physics</td>
<td>182.87</td>
<td>181</td>
<td>180.37</td>
<td>186.75</td>
<td>182.25</td>
<td>181</td>
<td>181</td>
</tr>
<tr>
<td>St. Engineering</td>
<td>205</td>
<td>189</td>
<td>193</td>
<td>185</td>
<td>203</td>
<td>193</td>
<td>189</td>
</tr>
</tbody>
</table>

Similarly only eight departments have 7th College four-year plans that show at least one quarter with greater than 16 units; again, 7th College compares favorably:

<table>
<thead>
<tr>
<th>College</th>
<th>Total Units</th>
<th>Quarters with &gt; 16 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revelle</td>
<td>208</td>
<td>9 (20, 20, 20, 20, 18, 18, 17, 17)</td>
</tr>
<tr>
<td>Muir</td>
<td>196</td>
<td>4 (18, 18, 18, 17)</td>
</tr>
<tr>
<td>Marshall</td>
<td>196</td>
<td>4 (20, 20, 20, 18)</td>
</tr>
<tr>
<td>Warren</td>
<td>192</td>
<td>3 (20, 17, 17)</td>
</tr>
<tr>
<td>Roosevelt</td>
<td>208</td>
<td>6 (20, 20, 20, 20, 18, 17)</td>
</tr>
<tr>
<td>Sixth</td>
<td>196</td>
<td>3 (20, 20, 17)</td>
</tr>
<tr>
<td>Seventh</td>
<td>196</td>
<td>4 (20, 18, 18, 17)</td>
</tr>
<tr>
<td>Dept &gt; 16</td>
<td>Revelle</td>
<td>Muir</td>
</tr>
<tr>
<td>------------------</td>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>5.14</td>
<td>3.14</td>
</tr>
<tr>
<td>Chemical Eng</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>CSE</td>
<td>5.5</td>
<td>0.25</td>
</tr>
<tr>
<td>ECE</td>
<td>6.75</td>
<td>0.75</td>
</tr>
<tr>
<td>MAE</td>
<td>5.33</td>
<td>0.66</td>
</tr>
<tr>
<td>Physics</td>
<td>4.75</td>
<td>0.62</td>
</tr>
<tr>
<td>Struct Engineering</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

These two data points – total four-year plan units and four-year plan quarters greater than 16 units – provide a way to compare curricula across the colleges and majors. However, it is not clear that they represent a particularly strong proxy measure for time to degree. In an analysis of time to degree for the 2017-18 graduating class, only a weak correlation was found between number of >16 unit quarters and time to degree ($r=.27$); the correlation between total units and time to degree is only moderate ($r=.41$).\(^2\) Interestingly, if the analysis is restricted to engineering majors, the correlations is much weaker (>16 unit quarters to time to degree, $r=.15$; total units to time to degree, $r=.13$). These low correlations may be because of a discrepancy between the four-year plans, which assume all requirements are met by taking courses at UC San Diego, and students’ actual curricula, which will often include credit for AP exams and other means of satisfying requirements.

\(^2\) This analysis was limited to college/major department combinations where the total number of graduates was greater than 10 – only 36% of the college/major combinations.
Appendix G: Response to Senate Comments on Staffing

The Senate Council and several standing committees provided valuable feedback on the 7th College full proposal. The most widespread concern had to do with staffing concerns – expressed by the Senate Council, the Committee on Planning and Budget, and the Committee on Academic Freedom. In particular, these committees wondered whether the proposed staffing levels for the synthesis courses would be sufficient to deliver the college’s innovative pedagogy. There seem to be two related concerns:

1. Is the proposed level of staffing sufficient?
2. Will it be possible to recruit sufficient staff?

The proposal recommends and budgets staffing at the following level:

- Program director (Teaching Professor)
- 6-12 senate faculty
- 1 Unit 18 FTE

Assuming a total steady-state enrollment of 4000, and a 2:1 first-time full-time to transfer ratio, in any given year, there will be two lower-division cohorts of 666 (first and second year first-time full-time students) and two upper-division cohorts of 1333 students (first-time full-time and transfers). The lower-division students will all need synthesis courses each year, while the upper-division students will divide their upper-division synthesis courses between junior and senior years. This means that, on average, we should require synthesis courses to serve the following numbers of students each year:

1. Year 1 Synthesis 1: 666 students (first-time full-time)
   Year 2 Synthesis 2: 666 students (first-time full-time)
   Year 3 or 4 Synthesis 100: 1333 students (first-time full-time and transfers)
   Total: 2665 students

A possible model to serve these students is given in (2), and staffed as in (3):

2. 5 Synthesis 1 cohorts (133 each)
   5 Synthesis 2 cohorts (133 each)
   10 Synthesis 100 cohorts (133 each)
(3) Director: 2 courses  (salary subsumed by the college appointment)
   Other senate faculty: 12 courses
   Unit 18: 6 courses  (1 FTE)

This staffing is similar to what we find in other colleges; for example, in 2015-16, 15 faculty covered 20 sections in Eleanor Roosevelt’s Making of the Modern World core sequence. While this model is based on specific assumptions (number of students, first-time, full-time:transfer ratio, etc.), colleges need to monitor demand and schedule courses accordingly; this will be the case for 7th College as well. The administration is committed to adjusting resources appropriately.

The second concern has to do with recruiting faculty and graduate students to staff the courses. As discussed in the proposal, this is part of a more general challenge of staffing campus courses in light of increased undergraduate enrollments. Our campus will have to face this challenge regardless of whether there is a new college and how general education is structured. We are not adding a new college in order to enroll more students; rather, we are adding a new college in order to better serve our already-growing student population.

Possible elements of a solution for staffing the synthesis courses include:

- Increase the number of FTEs in departments that provide teaching support to the colleges. This might be in the form of Teaching Professor (L[P]SOE) positions that are responsible for both department-based alternatives courses and synthesis courses. The current Campus Multi-Year Faculty Growth Plan calls for 150-200 new ladder-rank FTEs over the next several years; the administration has stated that staffing the general education courses will be a consideration in this FTE growth.
- Diversify the faculty and Teaching Assistant pools. The interdisciplinary nature of the synthesis courses raises the possibility that faculty and teaching assistants from multiple divisions may be well suited to the program.
- Develop teaching assistant guarantees between the colleges and departments to simultaneously provide teaching assistants for the colleges and funding for departments, allowing departments to eventually reliably grow their graduate programs. A committee created such a plan a few years ago and is currently meeting to work on next steps.
- Identify promising undergraduates who have successfully completed the synthesis courses and who plan to continue to a Masters’ program as part of a 4+1 curriculum. They may be mentored to assume teaching assistant positions once they transition to graduate status.
In addition, the administration has confirmed that it will explicitly factor campus needs for college general education instruction into the next multi-year faculty hiring plan.
Appendix H: College Leadership, Staff, Faculty and Operating Resources

As is the case with other colleges, 7th College will be led by a faculty provost who manages a team of professionals in the college writing program, academic advising, student affairs, and residential life.

All general campus faculty (as well as some faculty from Scripps Institution of Oceanography and Health Sciences) are affiliated with a college (while holding appointments in their home departments or other academic units). Furthermore, each college has faculty from the full range of academic disciplines. Beginning in Spring 2019, the campus will recruit existing faculty to form the founding faculty of 7th College, pending Regent’s approval (expected in June 2019). The size of the 7th College faculty will increase as new faculty are hired to campus and should, eventually, grow to the level found in the other colleges.

A search for the 7th College provost will take place in Fall 2019; this will be a campus-internal search limited to tenured senate faculty. The provost will nominate a faculty Executive Committee from the 7th College-affiliated faculty, who are elected by the college faculty. The provost and executive committee will draft the Senate Regulation and college by laws. These will require ratification by the college faculty and the Divisional Academic Senate.

The provost will also begin to recruit college staff, including a writing program director, a dean of academic advising, a dean of student affairs, and a director of residential life. At steady state we expect approximately 30 staff FTE. The staff would be phased in as the incoming students are added reaching a steady state in four years. The following is a typical organizational chart for an undergraduate college:
Two sources of revenue support the colleges at UC San Diego. The administration, academic program, and student affairs staffing are supported by the campus core funds (state, tuition and student service fees). At a steady state of ~4,000 students, the students in the college will generate approximately $50M in resident tuition, nonresident supplemental tuition, and state support (net of financial aid) to the campus. Roughly 7% of that revenue will be needed to support the core funded portion of College. The residential life program is supported by student housing income, and is included in the housing fees charged to residents of campus housing.
Appendix I: Letters of Support from UC San Diego Academic Departments, Programs, Institutes, and Research Units

Letters – both from UC San Diego units and other UC campuses – are available at https://goo.gl/CZyZg6.