Options for Breadth

Breadth Subcommittee of the SUES Task Force

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Overview

A rich and varied educational experience is an essential, potentially transformative component of a modern liberal education. We aim for students to build key intellectual and practical skills, to acquire important bodies of knowledge, to participate in knowledge creation, to develop personal and social responsibility, and to flourish as individuals. Throughout their studies at every level, students should synthesize and integrate the skills and knowledge they acquire, and learn to apply them in new contexts.

With these aims in mind, the breadth subcommittee has developed three options for fostering breadth within the context of a complete education:

1. A “minimal tweak” of existing Stanford requirements would be the least possible change to the breadth model in light of probable developments elsewhere in the curriculum.
2. “Disciplinary breadth” would provide students with experience in varied subject areas: Humanities; Art & Music; Natural Science; Math & Statistics; Social Science; Earth, Energy, & Environment; and Engineering & Applied Sciences.
3. “Ways of thinking” is designed to foster learning diverse approaches needed to assess and engage with the multiplicity of problems confronting the individual, society and the broader world, now and in the future. Students would practice Moral and Ethical Reasoning, Aesthetic and Interpretative

These possible systems of distribution requirements are described in more detail in the following pages.

Whichever system is adopted for breadth requirements, we recognize that different individuals have different needs. The breadth requirement will not be fulfilled by taking a uniform set of courses, but will provide students with multiple choices in each category. This menu of courses should give most students sufficient flexibility to fashion their education, but a few students may benefit from an approach that provides even more individual freedom or more structure and coherence. We therefore suggest making the following opt-in mechanisms available to students to satisfy the aims of the breadth requirements:

- The Advising Intensive General Education (AIGE) would enable students to construct—in close consultation with a faculty sponsor—a program that fits both the rationale of the Stanford general education requirements and the student’s personal circumstances.
- The General Education Structured Program (GESP) would provide tracks that bundle multiple requirements together, providing a shared community and an intellectual coherence for students who choose this option.

Students would have the option to request one of these paths to satisfy whichever set of requirements is adopted by Stanford, or to choose from a menu of identified courses.

We believe that students will only get the most out of Stanford if they reflect on what it is they really want from their education. The best way to stimulate such reflection is to study how influential thinkers have constructed themselves through their own purposeful education and to do this under the tuition of a faculty member who made thoughtful, purposeful choices. We propose a framing course, “Education as Self Fashioning,” that would examine how people have explored knowledge in the past and how knowledge is built, guided by faculty members and major speakers.

The course would be writing intensive, and would engage students in close analysis of the material. Students taking this during their first quarter at Stanford would have an introduction to college-level discussion and analysis, an opportunity for reflection during a significant developmental time, and a shared experience on which they can draw in subsequent years.
Breadth Structure Option 1: Minimal Tweak on Existing Stanford Requirements

Description
Minimal tweak is our name for the least possible change to the breadth model in light of probable developments elsewhere in the curriculum. We articulate it mainly to illustrate how other options for dealing with breadth are more attractive than what is currently in place (but slightly updated). No one on the Breadth Subcommittee advocates for adoption of this approach.

The current system of GERs is based around IHUM and requires five courses for disciplinary breadth (DB), two courses in education for citizenship (EC), two writing courses (PWR), one writing in the major course (WIM), and satisfaction of the language requirement. Our view of what constitutes a minimal tweak to this system consists of replacing the three IHUM courses with three humanities and the one DB-Humanities course with a course in Art or Music. The mapping is shown below, with the changes/updates from the current system highlighted in blue.

<table>
<thead>
<tr>
<th>Current System</th>
<th>Minimal Tweak</th>
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<tbody>
<tr>
<td>3 IHUMs</td>
<td>3 Humanities</td>
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<tr>
<td>1 Engineering and Applied Sciences</td>
<td>1 Engineering and Applied Sciences</td>
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<tr>
<td>1 Humanities</td>
<td>1 Art and Music</td>
</tr>
<tr>
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<td>1 Natural Sciences</td>
</tr>
<tr>
<td>1 Social Sciences</td>
<td>1 Social Sciences</td>
</tr>
<tr>
<td>2 Education for Citizenship</td>
<td>to be recommended by EC Subcommittee</td>
</tr>
<tr>
<td>2 PWR</td>
<td>to be recommended by Writing Subcommittee</td>
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<td>1 WIM</td>
<td>to be recommended by Writing Subcommittee</td>
</tr>
<tr>
<td>Language</td>
<td>to be determined by SUES Committee</td>
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</table>

Rationale
The rationale behind articulating this option is simply recognition of the fact that all conversations about change require a baseline. This is the baseline as we see it. We also note that when difficulties arise, sometimes the only solution available is that which represents the least common denominator. Minimal tweak is our take on that. Again, we do not advocate for this option, we simply feel the need to articulate it.

Mechanics
The mechanics for this option are already in place. The one point that requires serious consideration is whether the capacity exists (or can be grown) at Stanford to accommodate requiring an experience in Art/Music.
Breadth Structure Option 2: Disciplinary Breadth

Warrant for the reform of general education requirements

The present system of general education requirements is seen to restrict student choice and to pack the first year with too many required courses. Beyond the first year, there is a concern that students select general education courses for convenience (schedule), easy grading, or both.

Reforming general education: a disciplinary breadth solution

The proposed revision of the general education requirements resolves the problem of student choice, enhances the range of disciplines required for breadth, and lessens the load of required courses in the first year. It also attempts, in its most ambitious version, to enhance the quality and depth of courses taken for general education over the course of a student’s career at Stanford.

Rationale

1. Stanford University embraces the liberal arts tradition in seeking to ensure that all students graduate with significant exposure to the forms of knowledge offered in Stanford's diverse schools and interdisciplinary programs.

2. Stanford's general education requirements seek to provide students with considerable choice when determining the content and timing of courses taken to fulfill disciplinary breadth. It is in the exercise of choice that students take an active role in shaping their education. General education should, as a rule, offer students the self-directed opportunity to explore new areas of knowledge.

3. Stanford sees the general education requirement as providing opportunities to deepen knowledge in selected areas of breadth. The first step toward expanding student horizons is met by the minimum breadth requirement, which designates the minimum number of courses each student must take in every major area of study. Beyond this, additional courses in selected areas of study must be taken in order to ensure that every student obtains a deeper understanding of the modes of analysis and skills associated with a discipline outside of their own major area of study.

The fine print: making improvements and building a system that works to enhance student choice and ensures breadth in the Liberal Arts tradition

The proposed structure of disciplinary breadth requirements is presented in the diagram included with this memo. Several points of clarification will help the reader understand the logic and structure of the proposed general education/breadth requirements.
First, the proposal assumes that IHUM will not continue in its present form. Should there be a single-quarter required course (such as “Big Topics”), this course would count toward meeting the requirements delineated in the diagram, most likely by cutting, by one, the number of courses required in the humanities. If the “Big Topic” course cannot be classified in disciplinary terms, the total number of required courses would decline from ten to nine.

Second, PWR courses would be folded into the disciplines and the writing requirement would be met through specially designed courses drawing on a recalibrated group of PWR instructors connected to the disciplines. For instance, PWR instructors connected to Natural Sciences would, presumably, have expertise in science writing.

Third, the removal of IHUM and PWR from the first year would clear the way for our simplified breadth requirement for freshmen. Rather than require four special courses, as in the current system, we would require that students take three courses in three different disciplinary areas of breadth during their first four quarters at Stanford. This will ensure that students are exposed to a range of disciplines and their modes of analysis.

Fourth, we propose that some form of the Education for Citizenship requirement be retained. This requirement would be met, as it is in the current system, by taking specially designated courses in the various disciplines. The courses would be allowed to double-count for EC and breadth.

Fifth, our revised breadth model expands the disciplinary range by adding Arts and Earth, Energy & Environment as two new required areas of knowledge. We justify this expansion on the grounds that a liberal education should include, for all students, an exposure to the Arts (whether in terms of practice or criticism) and knowledge of the workings of the world around them (for instance, climate science).

Sixth, and finally, our most ambitious model for breadth includes requirements that seek to encourage students to deepen their disciplinary knowledge outside of their major field of study. This approach is outlined in version 2 (b) of the diagram.
### DISCIPLINARY BREADTH

**Current Requirements**
- IHUM fall
- IHUM winter
- IHUM spring
- Nat Science
- Eng. & Applied
- Math
- Humanities
- Social Science
- PWR 1
- PWR 2
- Ed. Citizenship 1
- Ed. Citizenship 2

**New Requirements Version 1**
- Humanities (3)
- Art & Music (1)
- Natural Science (1)
- Math & Stats (1)
- Social Science (1)
- Earth, Energy, Environment (1)
- Engineering & Applied (1)

**New Requirements Version 2**
- Humanities (2-3)
- Art & Music (1-3)
- Natural Science (1-3)
- Math & Stats (1-3)
- Social Science (1-3)
- Earth, Energy, Environment (1-3)
- Engineering & Applied (1-3)

**New Requirements Version 2: Example A**
- HIST FRENCH
- ART
- BIO 1, BIO 2, CHEM 1
- STATS
- ECON
- ESystems
- MEng

**New Requirements Version 2-Depth: Example B**
- HIST FRENCH
- ART
- PHYSICS, APP PHYS CHEM (not BIO credit)
- STATS
- ECON
- ECON 1, ECON 2
- ESystems
- MEng
- GES

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Summary: 9 courses in 7 areas. Eliminate IHUM and reframe PWR as supplement for regular courses in departments rather than as a stand-alone program. Education for Citizenship remains as in current requirements. Students required to take 3 “breadth” courses in their first 4 quarters; each course must be in a different area, at least one must be in Humanities. Simplified student choice, simplification and elimination.

Summary: 10 courses in 7 areas. Same student as in example A. However, in this model, classes for "breadth" cannot be in the student’s major. As the student in example A declares Biology, BIO 1 and BIO 2 are ineligible for breadth. Instead, the student takes two additional classes for breadth in the Natural Science area or, if she chooses, the additional breadth courses can be in any other field.

*Note: there are two models for this exclusion, both predicated on the concept of increasing breadth: (a) only courses in the departmental major would be excluded; (b) all courses that count for the major would be excluded, excepting courses in Math & Stats.*
Breadth Structure Option 3: Ways of Thinking
Carol Boggs, Caroline Hoxby, Kris Samuelson

Rationale for the breadth requirement:
In an increasingly complex world, humans' knowledge base is rapidly expanding. Today’s information may be subject to different interpretation as more information is accumulated. Thus, education must include learning to use the diverse approaches, or ways of thinking, needed to assess and engage with the multiplicity of problems confronting the individual, society and the broader world, now and in the future. A given way of thinking characterizes a particular set of traditional disciplines, and may be most familiar to a student through study in the major. However, disciplinary and interdisciplinary studies are enriched by drawing at least to some extent on multiple ways of thinking, and the problems facing individuals and society nearly always require multiple analytical approaches.

At the same time, in the words of Stanford’s first President, David Starr Jordan, "All education must be individual – fitted to individual needs". The breadth requirement is not fulfilled by taking a uniform set of courses, but rather, students chose from a menu of traditional and non-traditional courses within each area.

Overall learning goals for the breadth requirement:
Students should be able to:
• identify and assess relevant evidence
• understand and use analytical approaches appropriate to a given circumstance
• synthesize complex information to assess and solve multi-faceted problems facing individuals, society and the world
• communicate assessments and solutions of multi-faceted problems

Summary of breadth requirements:
• A framing course: In order to take full advantage of their Stanford education, students should have the opportunity to reflect on the role of a breadth requirement in a liberal education. We propose two options.
  o For the common freshman requirement, we recommend a course that “frames” the undergraduate breadth requirements. This course will examine how people have explored knowledge in the past and how knowledge is built. The course would be writing intensive, and would engage students in close analysis of the material.
  o Alternatively, if a “special first quarter” course is required or is an alternative option, we recommend that all students attend the major lectures for one unit. These major lectures should include an introduction to ways of thinking.
• A total of 9 additional breadth courses from 6 areas.
• Ideally, at least one course must be writing intensive, in addition to the framing course. Writing intensive courses are most likely to be found in areas 1 and 2 below, but may be proposed in any area. Writing differs among ways of thinking, and mastery of communication within at least one way of thinking is critically important. However, this requirement may be removed if it does not mesh well with recommendations from the writing sub-committee.

Skills requirements:
In addition to the breadth requirements, there will be a skills requirement in a foreign language and in mathematics. These two requirements may be met by placement examinations or by coursework.

**Mechanics:**
An oversight committee(s), with sufficient backbone to say “no”, will approve classes they believe fulfill a requirement, based on the defined learning goals within each area. These learning goals are ends-based, provide guidance for faculty and students, and focus on transferability of course learning to related intellectual domains. Faculty proposing courses should articulate how their course meets expectations based on the rationale and learning goals for the breadth requirement. Writing intensive courses will be given extra resources. In particular, we expect Writing Fellows will be assigned to support the writing component, as co-instructors.

Nontraditional courses, if approved, could meet a requirement. One example would be workshops concentrated into a short time period, such as the September Arts Intensive or Sophomore College courses. Other possibilities include interdisciplinary courses that provide breadth across disciplines through courses that explore relevant topics and themes. Alternatively, courses could combine spring break trips with a winter or spring course.

### 1. Moral and Ethical Reasoning
Requirement: One course is required, in which students learn to apply approaches used in moral and ethical reasoning.

Rationale:
Human conduct is framed by moral and ethical values and judgments. Ethical decisions are particularly challenging in an increasingly complex world. The ability to reason, draw defensible conclusions and assess competing claims is fundamental to development as an individual and to effective participation in society. Courses addressing moral and ethical reasoning should introduce students to the pervasiveness, complexity and diversity of normative concepts and judgments, in the light of diverse ethical perspectives.

Learning outcomes:
Students should be able to:
- understand diverse normative concepts and arguments
- develop and articulate ethical perspectives on concrete dilemmas
- evaluate competing ethical perspectives on human problems

### 2. Aesthetic and Interpretative Understanding
Requirement: Two courses are required: one from Literature and one from the Arts (e.g. Music, Drama, Creative Writing, Art History, Film and Media Studies, Art Practice, Dance). One must be in theory, history, or critical analysis. The other may engage in the creation of art.

Rationale:
Works of artistic expression offer unique approaches to understanding the human condition. Courses in literature and the arts introduce students to the creative disciplines and the
domain of the imagination. They also provide students with a foundation for analyzing and interpreting expressive written and artistic works.

Learning Outcomes:
Students should be able to:
- attain significant historical perspective on the materials of creative culture
- develop skills for the study, analysis, and interpretation of expressive works
- understand how to engage with a variety of literary forms
- explore their potential to produce original creative projects
- acquire tools for engaging with artistic works that explore and articulate issues of humanity.

3. Empirical Reasoning
Requirement: One course in which students learn to apply methods used in empirical reasoning and problem solving, such as statistics, probability, mathematics, logic, and decision theory.

Rationale:
After they graduate, students will make important decisions, for themselves and others, under conditions of uncertainty. They will have to decide, for example, what projects to undertake, what policies to support, what education or medicine is best for their family, and so on. In most cases, they will be called upon to evaluate empirical claims made by others. In some cases, they will have to devise their own empirical strategies to answer a question. Courses in empirical reasoning help students learn how to devise an empirical strategy, how to gather data to implement their strategy, and how to assess empirical evidence with which they are presented. Empirical reasoning should be taught in the context of a variety of subjects so that students can work on topics of intrinsic interest to them, such as public policy, engineering, economics, politics, management science, medicine, and law.

Learning outcomes:
Students should be able to:
- set and solve optimization problems (broadly construed), use data, think probabilistically, and evaluate risk.
- recognize when the available evidence is too weak to decide a matter and how to distinguish between causal evidence and correlational evidence.
- be comfortable not just with the abstract principles of probability theory, statistics, decision theory, logic, and mathematics, but be confident applying empirical methods to concrete problems and real data.
- devise an empirical strategy to answer a concrete question of wide concern.
- recognize common mistakes that human beings make in empirical reasoning and problem solving.

4. Scientific Analysis
Requirement: Two courses required, from two distinct areas of study. Interdisciplinary courses may fulfill this requirement, but the two courses must be in distinct areas.

Rationale:
Scientific literacy is critical to problem-solving in today's world, touching many aspects of human life. Such literacy includes an intellectual curiosity about the natural world and familiarity with the way in which knowledge about that world is obtained, analyzed and interpreted. Courses addressing scientific analysis should enhance the students’ ability to analyze and synthesize scientific information, to understand the limitations and strengths of existing theories, and to ask strategic questions.

Learning outcomes:
Students should be able to:

- understand the distinction between scientific fact and theory and the role of each in scientific inquiry
- utilize inductive and deductive reasoning and understand the role of each in scientific inquiry
- formulate hypotheses and experimental designs to test those hypotheses
- understand and work with probabilistic outcomes and risk analysis
- assess and synthesize scientific facts, concepts, theories and experimental data relating to the natural world

5. Social Analysis
Requirement: Two courses that use systematic theoretical and empirical inquiry to analyze societies critically. One of the courses must analyze a non-U.S. society or societies.

Rationale:
The human experience is pervaded by the choices individuals make and the opportunities they face. Society shapes these choices and opportunities, but social structures and practices vary across time and space so that individuals can end up with very different experiences. Social analysis helps us why social institutions differ and why they have the effects they do. The several disciplines in social analysis use variety of approaches to explain human behavior.

Learning outcomes:
Students should be able to:

- apply the methods of research and inquiry from at least one social science discipline to the study of human behavior.
- evaluate rigorously the effects of social institutions on individual actions.
- use evidence and data, including at least some of the following: administrative/official records, surveys, cultural artifacts, experiments, interviews, oral histories, field observation.
- use strategies for making sense of data including causal reasoning, hypotheses testing, modeling, and critical analyses of behavior and institutions.
- identify how scholarship has influenced organized efforts to ameliorate social problems.

6. Engaging Difference
Requirement: One course.

Rationale:
In an increasingly complex world, it is crucial that students be prepared to understand the
distinctions and variations among groups of people. Further, a respect for the diversity of experiences and perspectives that come from differences in gender, race, ethnicity, sexual orientation, and social class is essential for moving within shifting social contexts.

Learning outcomes:
Students should be able to:
• attain an understanding of the history and traditions of diverse groups of people
• develop the ability to grapple with challenges that surface in interactions between people with diverse backgrounds and world views.
• acquire an understanding of power relationships within social and cultural contexts
• gain an appreciation for the richness of human difference
Opt-In Structure: General Education Structured Program (GESP)

SUES Sub-Sub Committee Write-Up
Providing Options to Meet Students’ Needs: The General Education Structured Program (GESP) Model (Chris Edwards, James Chu, Stephanie Kalfayan)

Rationale

- A single model to foster breadth among Stanford students will work effectively for most students.
- The majority of students appreciate the flexibility of a “buffet of course offerings” available to meet general education requirements. There are a small group of (approximately 10-15%) who desire additional structure and guidance in meeting their general education requirements.

Goals

The General Education Structured Program (GESP) is an option for students who desire maximal guidance and structure. GESP also focuses on enabling students to develop a shared intellectual community for one or more years. Students should leave GESP with

- Understanding of how multiple disciplines may be related
- At least one new methodology (e.g. “historical analysis, quantitative reasoning”) for analyzing the world
- Appreciation for diversity of disciplines and underlying rationale for the existence of each discipline (e.g. the scientist “gets” the rationale for comparative literature)
- Honed writing and rhetorical abilities
- An intellectual community of peers
- Up to 5 GERS (DB or EC) completed

Mechanism (Implementation)

The GESP system exists in tandem with our existing requirement system of DBs and ECs, but bundles multiple DBs, ECs, and/or writing requirements together in a coherent fashion. This is not seen as an option for 100% of the students, but one track that students can pursue along with a menu approach, and the advisor intensive approach. Whereas the advisor intensive maximizes student flexibility and self-determination for outliers in the student population, GESP maximizes elements of structure and guidance for students’ pursuit of breadth.
First Year
In the first year, there are two GESP options:

- One is residence-based, much like the current model used in SLE. Students live together and take a year-long sequence designed specifically to meet a set of requirements.
- A non-residence based option includes a similar year-long course sequence (different topic) that is designed specifically to meet a set of requirements deemed appropriate for the frosh year. Students in the non-residence based track would apply to be part of the group, and would meet together all year. However, they would be distributed across differing residence halls.

Second+ Years
Second+ year GESP is a year-long series tailored for second+ year students.

- Multiple GESP tracks are offered that fulfill a coherent package of breadth requirements. To illustrate, two potential GESP tracks might be “Scientific Literacy” or “American History.” Scientific literacy fulfills the engineering, science, and math DBs as well as the ethics and global comm ECs. American history fulfills humanities (or arts) and social sciences DB and the American studies, gender, and global comm ECs.
- The total academic commitment for a student who opts to enroll in GESP in any of his or her post-frosh years is 20 units. GESP counts for 6 units per quarter. Furthermore, GESP begins with a 2-unit intensive seminar component September, potentially modeled after Sophomore College.
- Each GESP enrolls at most 80 students distributed across 4 sections led by similar TAs or course assistants for the whole year.
- Students may decide to opt-out of GESP at any time during the school year. They keep any academic credit and breadth requirements fulfilled during prior quarters.

Further Elaboration: Residential Theme Houses/Study Abroad Option. It is possible that GESP tracks can be developed to deliver a year-long second year track around a residence based theme house. A track on Sustainability could encompass natural science, engineering, quantitative and social science DBs as well as ethics and global Comm ECs. A one-quarter study-abroad programs could also be fashioned (not necessarily at an existing campus) to meet a set of requirements. In this option, for example, all of the students at the campus in Australia would meet XX units of the natural science, social science DBs and global EC.

Incentives and Oversight
The GESP structure is dependent on faculty interest in developing courses that will meet the requirements. For that reason we do not believe there will be many of such tracks, but we do believe there will be sufficient interest for one or two more first year tracks as well as the development of some second+ year programs. Such development can be fostered by VPUE providing course development incentives including course relief and supplemental compensation during the course.
development phase. Once courses have been developed the Undergraduate Advisory Council will have the responsibility for certifying that the new course meets the current general education requirements.

**Examples of GESP in Each Breadth Approach**

**Ways of Thinking**

<table>
<thead>
<tr>
<th>Frosh Year</th>
<th>Second+ year</th>
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<tbody>
<tr>
<td>Moral and Ethical Reasoning (1)</td>
<td>Scientific Analysis (2)</td>
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<tr>
<td>Aesthetic and Interpretative</td>
<td>Empirical Reasoning (1)</td>
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<tr>
<td>Understanding (2)</td>
<td>Social Analysis (1)</td>
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<tr>
<td>(Writing Intensive satisfied)</td>
<td>[Mathematics (1)]</td>
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<td>Engaging Difference (1)</td>
<td>Social Analysis (1)</td>
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<td>Framing Course (1)</td>
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**Distribution**

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<thead>
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<th>Frosh Year</th>
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<tr>
<td>Humanities (3)</td>
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**Current Model**

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Opt-In Structure: Advising Intensive General Education (AIGE)

Description
Advising Intensive General Education (AIGE, pronounced “age”) is an opt-in structure for defining and satisfying a student’s General Education Requirements. It is intended for use by a small number of very unusual students for whom the other structural options (currently IHUM and SLE plus the other GERs) are a poor match due to either their educational preparation or personal objectives. It is not intended as a way to circumvent the general education requirements or vitiate the rationale behind them, rather its purpose is to permit unusual students to fulfill both the letter and spirit of the requirements by constructing—in close consultation with a faculty sponsor—a program that fits both the rationale of the Stanford general education requirements and the student’s personal circumstances.

The type of student we envision as being well served by this structure option might be, for example, a student who enters Stanford with significant, advanced preparation in a particular field in the humanities. Such a student might find that the expectations set in an introductory, pre-disciplinary course in the humanities is below their current level of training and might therefore wish to proceed to more advanced disciplinary studies in some field. Similarly, a student with advanced communication skills might bypass the introductory PWR course, replacing it with a WIM course in a particular discipline. Since the Language requirement already has the ability to test-out incorporated within it, we do not anticipate that it would be affected by AIGE.

Practically, a student would not be eligible to petition for AIGE until after completion of at least the first quarter at Stanford. The first quarter would then provide the student with both a test of their abilities and time to meet faculty who could advise the student about attempting to construct and follow an AIGE path for fulfilling their GERs. In order to be admitted to the AIGE structure option, the student would have to satisfy the following criteria:

(1) The student must have completed his/her first quarter at Stanford.

(2) The student must have obtained the advice and consent of an Academic Council member willing to act as their AIGE sponsor and advisor throughout the duration of their undergraduate study. Note that the responsibility of the AIGE advisor does not terminate when the student obtains a major-field advisor; it continues until the requirements have been verified as having been satisfied.

(3) The student must submit an AIGE Proposal including an explanation of their vision for their education, why it is necessary to deviate from one of the predefined structures, and how their Proposal embodies the rationale articulated for the Stanford general education requirements. These materials—developed by the student in consultation with their faculty sponsor—are submitted to the (new) General Education Governance Board.
that (we anticipate) replaces the current IHUM Governance Board. Authority to accept/reject or suggest changes to the AIGE Program Proposal will rest with the GEGB as part of its charter to oversee all aspects of the GERs at Stanford, regardless of the structure option chosen (default, SLE, AIGE).

Prospective students would be advised of the existence of the AIGE option at the same time that they are provided information about the default option—Cardinal Orientation and General Education, COGE, pronounced “co-gee”—and about Structured Liberal Education (SLE). Unlike SLE, students would neither be required to indicate interest in, nor permitted to enroll in AIGE prior to attending Stanford. Instead they would be automatically entered into COGE for their first quarter of studies. Transition from COGE (or SLE) to AIGE would be permitted any time after completion of the first quarter and acceptance into the program.

AIGE is not intended as a complete substitute for the default GERs: Only those aspects identified specifically as being a poor fit to the student’s vision, preparation, or educational objectives—as outlined in their AIGE Proposal—would be redesigned. The remaining components of general education would be completed through one of the conventional structures (COGE, etc.)

**Rationale**

The rationale behind this structure option is that a pathway should exist that allows the Stanford general education requirements to be fulfilled by any student regardless of their level of preparation, unusual circumstances, or unusual vision for their education. Since the default general education program (COGE) necessarily reflects expectations about the state of preparation, suite of academic and non-academic experiences of our students at entry, and probable range of disciplinary studies that might be pursued while at Stanford, there will be, without doubt, a small number of students for whom the COGE prescription is a poor fit. Since we anticipate that the COGE breadth requirements will be significantly more flexible and versatile than our current system, we reiterate that the number of students requiring the AIGE approach is likely to be small. However, we also believe that all students should be well served by the General Education Requirements, and as such, the ability to make these meaningful to even the rare student for whom COGE is a poor fit should exist. AIGE is intended to fill that purpose.

**Mechanics**

As stated in the Description, this structure option would be described to prospective students before they arrive at Stanford, but they would not be eligible to elect this option until after completion of their first quarter. The General Education Governance Board would be the party responsible for accepting or rejecting any application to move to this structure. Upon approval by the Governance Board, the registrar’s office would mark the student as using the AIGE structure for its GERs. As part of the application packet, the student will supply a Program that indicates
how breadth and other elements of the rationale for general education are to be achieved in the program. Tracking of completion by the Registrar might consist of checking off completion of courses or experiences that are listed in the Program to satisfy the key elements of the proposal. The key elements might be represented in the registrar’s database as “tick boxes” or whatever method is to be used for analogous purposes in the Advising Transcript currently under development. Presumably the same approach and data structures as used to depict the courses that constitute an Interdepartmental Program could be used to depict an AIGE general education program with coherence and readability on the transcript. It is anticipated that the number of general education elements to be satisfied by the Program would be similar to, if not identical with, the number of elements in the COGE structure.

Should a student decide that they do not wish to continue to follow their approved AIGE program, it could be amended by petition to the Governance Board. That petition would consist of an explanation of the reason for the change(s) and a new Program proposal, both approved by the academic counsel advisor. Should the student decide that they did not wish to continue in the AIGE program, they could petition to return to the COGE program by providing an explanation of the reason for the transition and a Transition Plan that indicated their proposed mapping of AIGE courses or experiences onto the requirements of the COGE structure. This petition would also be submitted to and acted upon by the Governance Board.

Possibly Asked Questions (PAQs)

Should we have the student assigned a professional advisor in addition to the faculty sponsor/advisor? How would they get advice in areas that are not in the domain of expertise/experience of the faculty advisor?

There are two ways to think about this plan: One is where it is completely individualized—sort of the Brown at Stanford approach. The other is where this is used only for components of the GERs that do not work for a particular student for a particular reason. If implemented using the first approach then it is likely that a single faculty advisor would not be sufficient. Either multiple faculty advisors, or one faculty advisor and a second advising professional would probably be needed. As currently described the program follows the second path—deviations are specific to a particular student, and for that student, a particular aspect of the GERs. The idea there is that while a student may well have special needs in some aspect of the GERs, it is much less likely that there are special needs in multiple aspects. And the prospect of a completely custom program that replaces all of the standard pathways and yet still satisfies the overall rationale for general education at Stanford is slim.

Would this be useful for transfer students?

As pointed out by SK, this could become the default approach to mapping a student’s prior experiences onto the Stanford GERs.
Might this be useful for a student who would like to complete a significant portion of their education abroad?
Yes, if the reasons for pursuing such a program met the threshold for acceptance set by the Governance Board. We can imagine a number of possible visions that would benefit from a significant overseas experience. And if that experience were of such a duration so as to make completion of the GERs through one of the standard channels problematic, AIGE could be a way to reconcile the student’s vision and needs with our objectives for general education. This is likely to be a case where more than one advisor might be necessary.

Has anyone talked to the Registrar about whether we can accommodate such a system?
Yes, CE spoke with Tom Black about this. Tom sees it as being a relatively easy exercise in mapping the Program Proposal to a set of internal fields describing our GERs. His thinking was that this was easier than the Advising Transcript to execute and maintain.

How high should we set the barrier to entry for the program? What is the thinking about the relationship between the barrier and participation?
SK, JC, and CE have talked about this a fair bit. We all feel that this program is meant for a relatively small number of students—definitely less than 5%, maybe much less if COGE is significantly more flexible and attractive than the current system. As such, it seems wise to set a relatively high barrier, hence requiring the sponsorship of a faculty member, the creation of a Program Proposal and the articulation of the rationale that supports it, and the review and approval of the General Education Governance Board. The idea is to send out a signal that says that this is available, but you really are going to have to work for it, and to be successful you will have to be able to both articulate your reasons and show us how they fit what we seek to achieve in general education.

Is the Governance Board the right group to have the final say on such petitions? Might not such a group become too invested in our pre-defined system and therefore insensitive to the needs of students who might be well served by AIGE?
This is a concern. One answer to this might be to have the board make a recommendation about acceptance/rejection of the proposal but then leave the final decision with the VPUE. This has the advantage of obtaining both their wisdom & advice about general education and having a faculty member (the VPUE) who has a larger perspective involved.
**Framing Course: Education and Self fashioning**

a program of courses for the fall quarter of freshmen year

**Rationale**

Students come to Stanford with a dream that their education will be broad, meaningful, and coherent. While intellectually they have it in their power to accomplish this goal, the sheer wealth of opportunities at Stanford can be overwhelming. Students must make choices, whereas in high school they were typically able to excel in many domains and nearly exhaust their curricular and extracurricular options. We believe that students will only get the most out of Stanford if they reflect on what it is they really want from their education and on the different places in the university where their interests can be met. The best way to stimulate such reflection is to study how influential thinkers have constructed themselves through their own purposeful education and to do this under the tuition of a faculty member who made thoughtful, purposeful choices himself or herself. Conducting this exercise during their first quarter at Stanford, guided by faculty members and major speakers, students will enjoy a shared experience on which they can draw in subsequent years, as well as an introduction to college-level discussion and analysis.

**Concrete Goals**

*Education as Self Fashioning* courses should:

- provide students with a framework for thinking about their college education.
- give students an understanding of the intellectual reasons why college is set up as it is. For instance, why are there both breadth and major requirements? Why is it useful to try out multiple ways of thinking?
- give students a shared experience that provides fodder for intellectual discussions outside of the classroom.
- ensure that students get to know an academic council member in
  - a fairly small setting;
  - a course that deals with topics that trigger discussion of how to get the most out of the college experience. (In contrast, the typical freshman seminar exposes students to the research of a faculty member--a rewarding but very different experience.)
- raise students’ intellectual level by ensuring that they read, analyze, and write on important texts in a manner that is fully collegiate.
- allow students to appreciate the range of approaches that different faculty might bring to the same material.
- include an introduction to Stanford, as envisioned by the VPUE.

**Implementation (not including "roll-out", see below)**

- Courses would be taught by an academic council member. Our strong belief is that Stanford has numerous faculty, in all of its schools, who themselves pursued education in a thoughtful, purposeful way, taking in the wide array of opportunities at university and fashioning a way through them by which they attained both broad
intellectual goals and specialized knowledge. We believe that such faculty would not only be role models but would also relish the opportunity to discuss relevant texts written by influential thinkers.

- Each faculty member would teach the same material in two sections of his or her course but only teach each section once per week. See below for the other meeting each week.
- Courses in the program would ideally contain about 15 students, but the university's resources would be taken into account. The goal is to have sections that are sufficiently small for substantial discussion of the readings.
- In 4 of the 10 weeks, the other meeting would be an Education as Self-Fashioning program-wide lecture by a major scholar, some of whom would come from outside Stanford.
- The program-wide lecturers would be picked by a committee of faculty and students from the previous year and would be given clear guidance on the program's goals and on topics that are likely to work well.
- Program-wide lecturers would be asked to suggest a text that would enable students to derive the most from their lecture. The selection of this text would also allow the committee to provide feedback to lecturers on the fit between their proposed lecture and the program.
- In the remaining 6 of the 10 weeks, the other meeting would be led by the Writing Fellow assigned to the section. This would allow the course to be writing intensive and replace one PWR course.
  --Writing Fellows would be expected to attend the weekly meeting led by the academic council member and would set writing assignments in coordination with him or her. Writing Fellows would be primarily responsible for providing feedback on writing assignments and grading them.
- Faculty would be free to set their own syllabi, attending to the goals of the course. However, faculty may wish to incorporate the texts suggested by the program-wide lecturers.
- There would be an optional faculty seminar in which faculty would present materials that fit the program's goals well and that may be less familiar to other faculty also teaching a course. For instance, a historian of science might give a seminar on a text that he or she feels exemplifies how an important scholar has articulated the scientific way of thinking and fashioned his own education. The historian of science might provide colleagues with exemplary study questions, reading rubrics, exercises, and other means that have helped students get the most from the text.
- Students would be provided with a short description of each course in the program, emphasizing the academic council member's biography, his or her interests, and the key texts on his or her syllabus. Students would rank courses in the program in order of preference, and the allocation of students to courses would be by a process analogous to that used for freshman seminars.
- Because the courses would have a strong writing requirement, they would fulfill two freshman year requirements that we believe will be proposed by the Freshman Year subcommittee: a writing course and one other course (a Freshman seminar or a "Big Ideas" course). The units assigned to the courses would be commensurate
with its double duty--for instance, 7 units.
• Some courses could be associated with a freshman residence.
• If an "Introduction to Stanford" is embedded in the program, each course would be assigned an upperclassman who is trained in the Introduction's goals.

Roll-out/Pilot
• To ensure that the Education as Self-Fashioning program "gets off the ground," we propose that the program be launched in pilot form with 7 to 10 faculty. This number of faculty is small enough to ensure fidelity to the program's ideals. However, this number of faculty would also be large enough to make the program-wide lectures important.
Charge to the Breadth Subcommittee

How do we prepare students with the specialized skills they need to succeed in their chosen majors and professions while also honoring the commitment made in Stanford’s Founding Grant to offer “studies and exercises directed to the cultivation and enlargement of the mind”? How do we equip students with the breadth of vision and interconnected world, and to appreciate the wonders of the world around them? There are several essential components of our considerations:

• The interplay between various requirements.
• The current system of requirements at Stanford.
• Requirements at other universities.
• Methods of encouraging breadth, including requirements.
• Appropriate level of sophistication.
• Evaluation (e.g., graded vs. ungraded) and how best to encourage risk-taking and exploration.
• The challenge of students’ differential preparation.
• Implementation mechanisms, including certification.