YALE-NUS COLLEGE
COMMON CURRICULUM REPORT

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INTRODUCTION

This is a joint report on the Common Curriculum (CC) from the Yale-NUS Student Advisory Group (SAG) to the Dean of Faculty, and the Yale-NUS Student Government Academics Committee (SGAC) and its public representatives. It consists of specific recommendations and summarised feedback from various channels.

Process and structure

The contents of the report come from a thorough review of previous feedback on curricular issues provided to the SGAC and SAG, additional polling of students through the Yale-NUS Student Government website and social media pages, and in-depth focused group discussions carried out as a collaborative effort between both the SGAC and SAG. Online polling results (See Appendix I) generally reflect feedback received through other channels, with about 50± students participating.

These are the five key areas which the report covers, and their respective individuals in-charge:
   A. Convergence and coordination (Sanjana Tadepalli, Sarah Novak, Tee Zhuo)
   B. Number of courses (Jason Carranceja, Maria Ivanenko)
   C. The Science curriculum (Liam Rahman, Chia Peiyun, Ling Xi Min)
   D. Historical Immersion (HI) and Current Issues (CI) (Jay Lusk, Swarnima Sirca)
   E. Possibility of electives in the first semester (Jared Theodore Yeo, Jessica Teng, Elaine Li)

Each area will detail the initial guiding questions, recommendations, and a short summary of the applicable feedback. As seen above, two to three authors worked on each area to draft sections based on the feedback, to ensure a balanced and accountable reporting of student sentiment. These were then compiled into a single report by the editors, after which the report was commented on and proofread by others in the committee and volunteers from the student body.

Limitations

1. Very short notice was given to draft this report, and there was little time to gather feedback and compile it. We note in advance that mistakes may arise from this limitation.
2. While there are many important and pressing issues brought up in this report, we are aware that some students are satisfied with the status quo. We acknowledge the role of selection bias and the tendency for individuals to voice negative over positive opinions.

EXECUTIVE SUMMARY

These are the key points from the report. Students…

1. Overwhelmingly disagreed with adding an elective slot to the first semester, as they thought it was detrimental to the spirit of the CC; a possible alternative is encouraging students to audit courses in the first semester could benefit the student experience.
2. Overwhelmingly agreed that grading should be more standardized to ensure more convergence across sections, and that students should not receive completely contrary guidelines from section to section within the same course. Students believe that establishing clear guidelines in the form of more general rubrics is crucial to development of convergence in assessment.
3. Overwhelmingly agreed that the different tracks in Science should not be joined, and that the Sciences should be made a distribution requirement, with a few variations to implementations. While they note that this would remove some of the commonality of the CC, students feel that the current approach to science education is ineffective for all students, science background regardless.
4. Overwhelmingly agreed that there should not be "curved" grading. This sentiment is particularly widespread with regard to Quantitative Reasoning.
5. Mostly agreed that CI and HI requirements should be significantly eased, or that their current iteration should be removed from the curriculum, due to the arbitrary nature of the selections within those requirements, and the undue burden they place on study abroad, major requirements, and capstone projects.
6. Mostly agreed that while a good idea in theory, the development of interdisciplinary courses should be very carefully administered and executed to ensure student buy-in to the process.
7. Mostly agreed that more discussion between course coordinators, including potential restructuring of CC syllabi could help ensure greater coordination within the CC.
8. Had conflicting views on the ideal size of the CC.

A. CONVERGENCE AND COORDINATION

Guiding questions

1. What were good and bad examples of coordination/convergence within the CC from your perspective?
2. How could coordination/convergence have been better?
3. Was grading and assessment generally good (fair, open etc.)?
4. What about grading between courses?
5. What about grading between seminars in the same course?

Recommendations

1. The direction and specific learning outcomes of the Science Curriculum needs to be clarified (see 'Science Curriculum').
2. Curved grading, whether formal or informal, should generally not be permitted, and mechanisms (e.g. blind grading) should be set in place to prevent that.
3. All instructors should start semesters by setting clear expectations for writing style and convention, and provide samples of what they perceive as "good writing" if possible.
4. A common rubric for grading across sections of a CC course should be created for both assessment and student appeals.
5. A survey of essays/assignments across different classes that received the same grade should be conducted and the results analysed by the faculty to test grading unevenness.
6. The value and role of the Writer's Centre should be emphasised more.
7. Natural themes that branch across courses should be identified for coordination.

Summarised feedback

Content and skills
1. **More natural connections needed:** Students have expressed interest and support for more concrete "moments" of connection across courses. An example given of a lost opportunity to capitalise on connections was the wide theme of "family", in CSI (family structures), SI (phylogeny), LitHum (families in Genesis). Others have noted that forcing connections can be artificial. Some students mentioned that connections made between different modules were often forced, even though facilitators of different modules were from a single teaching team required to meet and plan the syllabus together.
2. **Course content and sequencing needs to be better:** The learning objectives of the science courses need to be revisited. Many students report that they feel that the role of

science (especially SI) in the CC remains especially ambiguous, although as an area of knowledge it is a valuable part of a balanced shared corpus.

3. **Course facilitators should coordinate logistics and workload (inter-course and intra-course):** Students report different workloads across different classes in the CC. Efforts should be made to ensure the number of deliverables from students does not exceed a certain amount (e.g. MST students are expected to submit three essays, while FOS has over 25 deliverables per semester). Efforts must also be made to monitor workloads between different sections of the same course. While this may affect instructor autonomy, students should still have generally similar workloads given that they do not get to choose instructors in a compulsory CC.

4. **Active coordination surrounding writing in the CC:** Students do not feel that a specific "writing" course is required. However, since writing skills are a pedagogical goal and a prevalent mode of assessment of the CC, students feel that efforts could be made to coordinate writing goals across the CC. Standardized rubrics across courses (and sometime across sections of the same course) and standard citation styles will provide students with more coherent writing guidelines. Some have recommended that all instructors should start their courses by also clarifying the writing styles and conventions they want to see. Such standardization could also help the Writer's Centre be more effective.

Grading and assessment

1. **Coordination and convergence in grading and assessment needs to be improved both across sections and across courses:** Students report large differences in grading between sections of the CC. Students suggested that one solution would be to evaluate, via a committee, the graded essays/assignments of students from different sections who received the same grade to *determine* a common standard. Coordination and assessment across different classes of the CC must be closely monitored and focus should be on testing knowledge on subject matter. Students (particularly in FOS and QR) report that a very large weightage was placed on group work or on assignments in FOS that were purely reflective and did not test anything taught across the semester.

2. **Maintain instructor autonomy while also monitoring assessment styles in different seminars to reduce unevenness:** We acknowledge that diversity of how classes are conducted between different seminar groups can be a strength of the CC. However students have said that this diversity is not channeled well and instead leads to unevenness in expectations. A solution is a rubric which is generic enough to retain the benefit of diversity but still exists to give some semblance of structure, and which could also be referred to in an appeal.

B. NUMBER OF COURSES

Guiding questions

1. Should the number of CC courses change or stay the same?
2. If changes are needed, which courses should be affected?

Recommendation

1. First semester should remain as it is.
2. Freshmen should be given the option to auditing or overload modules without CC prerequisites.
3. Adjustment and rescheduling of CC modules need to cater to students already planning their majors.
4. Science modules should be better structured, and follow a progressive, cohesive learning roadmap.
5. If a common curriculum course is to be scrapped, then the other modules should be restructured to provide balance among the disciplines.

Summarised feedback

1. **Adjustments to the first year:** Sophomores and juniors felt that the first semester should remain as it is. While SI is generally unpopular among students, it provides the necessary science component for the first semester. As for the second semester, a couple of students suggested the combination of QR with another CC module. However, students admitted that QR also taught them invaluable skills. A suggestion raised is to flip QR with SI such that students can better incorporate skills learned in QR in the other CC modules. However, sophomores worry that less students will take QR seriously because of its position in the ungraded semester.
2. **Overload, audit, and language modules during the first semester:** While some students expressed interest on taking language classes during their first semester, upperclassmen generally argued against a language elective during the first semester. They felt that the first semester is fundamental in building a common experience for new students of the college. However, students support the idea of auditing language course during the first semester. Some felt that transparency, clarity, and consistency regarding the audit petition process should be improved.
3. **Downsizing would facilitate students' planning of their majors**. Juniors said they were not able to plan for their module selection and study abroad programs. Students pointed

out that the size and organization of the common curriculum occupied most of their first three semesters, severely limiting their options to take gateway courses to majors.

4. **Retention and restructuring of science modules**. A number of students from all three batches felt that the science component of the common curriculum could have been better structured. A number of juniors proposed that SI could have followed a trend similar to IS ⅔, FOS, HI, and CI, where students can select prefered topics. Science track upperclassmen also agreed that IS 1 did not prepare them for upper level science classes and could have been replaced with a traditional introductory science modules aligned for their course of study. Instead of ridding the science modules, adapting HI and CI's structure can help cater to more students.

5. **Equal deduction among the disciplines**. Upperclassmen generally argued that QR and either one of LH/PPT2 should be removed. However, this reduction of modules should be equal across the disciplines. Removing a social sciences/arts and humanities course entails that a science course would have to be removed as well.

C. SCIENCE CURRICULUM[4]

Guiding questions

1. How do you feel about the current iteration of Science?
2. How should Science be taught?
3. Should we put science and non-science major students in the same track (i.e. take a section together)?

General recommendations

1. **Make Science a distributive requirement**. Students agreed overwhelmingly that Science should be made a distributive requirement. For a wide-ranging discipline largely based on content accumulation, this would help account for the frustrations arising from wide differences in student ability, and also encourage faculty to teach in their fields of interest. Different models of such a system were proposed:
   a. The four courses required now to be replaced with a system of four big requirements (e.g. one course to be picked from the Life Sciences, one from Mathematics and Computer Science etc.), with introductory-level or '101' courses as options taught by specialists.
   b. A form of SI to remain (see recommendations under 'Scientific Inquiry' below), while the rest of the curriculum is conducted in an FoS style (see 'Foundations of Science' below for further recommendations).
2. **Do not merge the science and non-science tracks**. Students unanimously agreed that this would be a bad idea. This will cause the problem of different abilities seen already in SI to be exacerbated to a curriculum-wide level.

Scientific Inquiry

1. **Reduce the number of topics explored in SI.** Students generally feel that they did not have the opportunity to explore any one area in enough depth to learn anything significant from it. Sporadically moving from one area of science to another felt forced and connections between courses were limited and often non-existent.
2. **Structure SI to explore the history and/or development of science over time**. Students feel that part of SI already does this, and that it would be better if the course were

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[4] Recommendations and discussion have been merged for this area of focus given there was widespread agreement on the urgent need for change in Science, and that the reasons given for this need have been detailed comprehensively in the "Student Government Report on Science in Yale-NUS" submitted to the Dean of Faculty last semester. The section has also been split into courses as suggestions are naturally course-specific.

explicitly structured in this way. This would likely appeal better to intended non-science majors and better prepare them for Foundations of Science modules. It would also offer intended science majors the opportunity to explore science in a way which they have not done so previously in high school/junior college. Reframing the course in this way would also likely provide a better compliment to other first year CC courses. Introducing a chronological approach would likely lend the course to having more structure[5].

Quantitative Reasoning

1. **Flipped-classroom model should be removed from QR.** In-class testing, if it is to remain, should be done at the end of seminar sessions, rather than the beginning.
2. **Teach core statistical concepts through a theoretical approach** (such as Normal Distributions, Binomial Distributions, P-values, Significance levels, Confidence Intervals, and Central Limit Theorem), before moving on to regression and the use of statistical software packages.
3. **Teach single- and multi- variable linear regression using Excel.** Explicitly introduce concepts such as explanatory power, R^2 values and adjusted R^2.
4. **Statistical software to be introduced only after foundational knowledge in statistics is achieved.** Introduce the concept of using statistical software in order to achieve greater speed, efficiency, and accuracy in statistical analysis, after ensuring all students have a solid understanding of core concepts in statistics theory (including regression).
5. **Remove R. If R must be used, an introduction to coding must be provided.** Faculty cannot assume that peer help will be enough to bridge the substantial differences in students' pre-university exposure to coding and software.
6. **Create a support centre for assisting students in building Quantitative and Technical skills**. Similar to the concept of the Writers' Centre. Could involve formal programming of courses and workshops, and involve faculty, Dean's Fellows, and students with a prior background and strong preparation in relevant fields. Additional workshops could be made a requirement in the weeks leading up to the introduction of the application of software in QR. This centre could also be a hub for the sharing of additional resources for learning relevant skills (e.g. online learning).
7. **Reduce the weighting given to peer assessment in grading students.** Many students feel that undue weighting was given to peer assessment in the grading process for Quantitative Reasoning on the basis that many factors - including interpersonal relationships and biases - would likely influence peer assessment grading.

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[5] An example includes studying the development of early science from the ancient world for the first few weeks and then the development of science during and since the Enlightenment with a dedicated focus on each of what are known as the century of chemistry, the century of biology, and the century of physics, and how these have come together to impact the ongoing progression of science today and in the future.

Foundations of Science

1. **Clear and full syllabi.** Provide clear and full syllabi for all classes on or before the first class for all seminars. This should include any overarching common syllabus for FoS, in addition to syllabi for specific individual modules within FoS if a distributional-like model is maintained in which students choose electives within FoS.
2. **Consistent information.** Information on common assignments given by different professors should be consistent with that of other professors as well as being consistent with the syllabi distributed on or before the first day of class.
3. **Consistent assignment instructions.** Assignment instructions should be consistent with course syllabi. Assignment instructions should be maintained, and changes, where and if necessary, should be effected within a timescale allowing students reasonable time to fulfil the requirements of the new/amended assignment instructions.
4. **Clear assignment instructions.** Assignment instructions should be clear. Contradictions in terms in assignment instructions should be avoided so as not to misguide and confuse students as to what the assignment requires and what the required deliverable work should consist of. The use of 'Buzzwords' for the sake of it should be avoided where possible, particularly where they serve to enhance the contradiction. An example of contradictory assignment instructions leading to confusion is FoS 2 students being asked to 'expand, synthesise, and sophisticate topics explored during Foundations of Science through a creative visualisation'.
5. **Eliminate 'busywork'.** Students strongly feel that fewer assignments in which they are asked to explore subject matter more deeply and produce a more sophisticated piece of work contribute far more to learning than dozens of assignments, each of which is relatively insignificant as a component of a whole FoS 1 or FoS 2 course. Students felt demotivated by each assignment often accounting for only 3% or less of their overall grades and yet requiring substantial amounts of time. Many students reported having submitted over 30 deliverable assignments over the course of 1 semester of FoS, in comparison to less than 5 in many other courses, from which they claim the learning outcomes were significantly enhanced.
6. **Make modules one semester long, rather than seven weeks each.** The vast majority of students feel that half-semester mini-modules do not provide enough time to learn about a topic properly and would prefer full semester introductions to an area of science.
7. **Offer Computer Science and/or Introductory Psychology as elective modules within Foundations of Science.**

Integrated Science[6]

1. **Coordinate quantitative skills backgrounds.** With the cancellation of IS1, a first-year elective slot is introduced. It should remain in the foreground of IS curriculum design to work from a common quantitative toolbox, and to ensure its commonality.
2. **Create an inclusive environment for varying degrees of high school preparation.** Many students have reflected that they feel uncomfortable in science classrooms because their background is weaker than others. We believe that this issue can, and has been, addressed through classroom management techniques that, for example, explain the rationale for a particularly astute student's question to the rest of the class, instead of simply answering it and moving on.

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[6] The change in outlook for IS as a result of IS1 being cancelled is impossible to estimate. Hence, in this section we present suggestions that are less about curriculum and more about grading and classroom management.

D. CURRENT ISSUES, HISTORICAL IMMERSION, INTERDISCIPLINARY SEMINARS

Guiding questions
1. How do you feel about the current iteration of HI and CI?
2. Do you believe HI and CI make valuable contributions to the Common Curriculum?
3. How do you feel about interdisciplinary courses?

Recommendations
1. CI should be completely scrapped; teaching about current issues should be infused into every CC course (e.g. MST can discuss contemporary feminism).
2. HI can be included but either infused into the other parts of the CC, or in a different iteration. One suggestion is to have HI modules conducted like FoS.
3. Interdisciplinary courses sound good, but development of interdisciplinary courses to involve student feedback and suggestions.
4. Execute pilot test for interdisciplinary courses.

Summarised feedback
1. **CI and HI do not provide "common experience"**. Being distributional requirement courses, students did not see why HI and CI were valuable to the common experience of Yale-NUS College.
2. **Place undue burden on satisfactory completion of majors and capstone projects.** Especially in the context of study abroad. It is important to note that some students preferred the distributional model to the standard common model utilized outside of CI and HI, and that many students believe that science requirements could be more easily managed through a distribution system.
3. **Idea behind history and current issues good, but…** The minority defending HI believed that the freshman year CC modules do not provide a substantial enough historical foundation. Students also believe that CI and HI's learning objectives could be more easily incorporated into earlier CC modules as a solution to this problem. Students who defended CI and HI believed that the criteria for a course counting as a CI or HI course should be significantly relaxed.
4. **Interdisciplinary courses are a good idea but need to examine implementation and execution carefully.** Faculty should give extra attention to crafting detailed and specific course objectives and to communicate that information to students. Students also noted that the interdisciplinary nature of a course should not excessively impact the course, particularly with regards to grading, and should not affect requirements for Majors adversely. Without such criteria, interdisciplinary courses would not receive sufficient student buy-in. Since such courses do not exist at the moment, the discussion of these

courses was difficult as all the considerations were purely hypothetical. The issue of how professors would be incentivised to take on these additional courses was also considered.[7]

5. **"Gateway" courses**. Some students said such courses should not be interdisciplinary, as this would weaken the foundations of the courses in question. In direct contrast, other students pointed to CSI to make the point that interdisciplinary introductory courses would be an effective tool to allow students to survey multiple disciplines and develop a broad knowledge base within a certain field. Students argued this is the case because students would both have access to highly specific courses for their majors as well as interdisciplinary courses that would cater to a broader audience of students.

6. **Some subjects given to merging, more so than others**. Courses such as PPE, for example, could be structured to be multidisciplinary within each seminar; instead of looking at Politics, Philosophy, and Economics individually, the course could be crafted in a way that would integrate all three disciplines.

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[7] A possible solution to the issue of professor incentives for interdisciplinary courses could be to introduce an artificial limit on the number of courses that professors are allowed to teach, where such a limit would be determined by the Dean of Faculty. This would allow them to get the same credit for teaching half a course and acts as a measure to prevent all courses from becoming interdisciplinary.

E. FIRST SEMESTER ELECTIVES

Guiding questions
1. Should we give the option of choosing an elective in the first semester of freshman year?
2. If needed, are there alternatives to an elective?

Recommendations
1. Do not have first semester electives for freshman year.
2. Relax restrictions on auditing courses in the first semester of freshman year.
3. Auditing and overloading could be made possible especially for language courses.

Summarised feedback
An overwhelming majority of students opposed having electives in the first semester of freshman year. These are the main justifications:

1. **Common experience should be prioritised in first semester**. Students felt that the first semester is an opportunity to solidify the community and forge strong bonds through a CC experience. A first-semester elective would disrupt this, especially if it was done at the expense of removing a first-semester CC module.
2. **Problematic to have an elective in an ungraded semester**. Students would prioritize work in their elective at the expense of the CC. The CC would thus suffer in academic quality. Increasing module requirements to include an additional course would put too much pressure on students, particularly if it became an expectation in certain majors to take certain electives in the first semester. The first semester should also allow students to spend more time on co-curricular activities and to learn to balance different engagements before the challenges of the second, graded, semester.
3. **Auditing courses a viable alternative**. Students proposed relaxing restrictions on auditing courses as a first-semester freshman as a solution to the problem of lack of choice and access to electives in the first-semester. This would allow students to pick up the requisite skills for language study or other objectives while ensuring that they still experience a grade-free semester in common with their classmates.
4. **Overloading a possibility, especially for languages**. Some students felt that students should be allowed to request for an overload in the first semester if they prove their competence. However the majority of students felt that developing a standard for competence and allowing this request was counter to the spirit of the CC. In spite of this, students felt that an exception should be made for first-semester language electives as this could allow them to meet the criteria for certain summer language programs. However, students noted that allowing easier access to audit language courses in particular could provide an easier solution to this problem.

APPENDIX I - POLLING DATA

Polls were done online through the Yale-NUS Student Government website. See:
http://studentgov.commons.yale-nus.edu.sg/2015/08/28/common-curriculum-questions/

Convergence and coordination

Question: How would you rate coordination in the Common Curriculum (e.g. in terms of content, communication, assignment deadline clashes)?

Answer	Votes	Percent	
Good	13	26 %	
Neutral	26	52 %	
Not Good	11	22 %	

Question: Is grading and assessment between courses fair and transparent in the Common Curriculum?

Answer	Votes	Percent	
Yes	13	25.5 %	
No	25	49 %	
Not Sure	13	25.5 %	

Number of courses

Question: What should happen to the number of Common Curriculum courses?

Answer	Votes	Percent	
Increase	1	1.9 %	
Stay the Same	21	38.9 %	
Decrease	32	59.3 %	

Science

Question: Should we put science and non-science major students in same track (i.e. take the same section together instead of having IS and FoS)?

Answer	Votes	Percent	
Yes	9	17.6 %	
No	32	62.7 %	
Not Sure	10	19.6 %	

HI, CI and interdisciplinary courses

Question: How do you feel about the current iteration of HI and CI?

Answer	Votes	Percent	
Good	8	18.2 %	
Neutral	21	47.7 %	
Not Good	15	34.1 %	

Question: Do you believe HI and CI make valuable contributions to the Common Curriculum?

Answer	Votes	Percent	
Yes	18	41.9 %	
No	13	30.2 %	
Not Sure	12	27.9 %	

Question: What do you feel about interdisciplinary courses?

Answer	Votes	Percent	
Good Idea	33	67.3 %	
Bad Idea	6	12.2 %	
Neutral	10	20.4 %	

Electives in the first semester

Question: Should we have first semester electives?

Answer	Votes	Percent	
Yes	16	30.8 %	
No	33	63.5 %	
Not Sure	3	5.8 %	