THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Minutes of the 166th meeting of the Senate Committee on Undergraduate Studies (CUS) held on 11 November 2020 (Wednesday) at 9:30a.m. via the online platform Zoom.

Present:	Prof Andrew HORNER (Chair)	Prof Anirban MUKHOPADHYAY (Secretary)
	Prof Melody CHAO	Prof King-Lau CHOW
	Prof Joshua DERMAN	Prof Jimmy FUNG
	Mr Pak-Ho FONG	Prof Allen HUANG
	Prof Stanley LAU	Prof Pak-Wo LEUNG
	Dr Cindy Xin LI	Miss Wing Yau LOK
	Prof Philip MOK	Prof Emily NASON
	Mr James PRINCE	Prof Kevin TAM
	Prof Melinda WHONG	Prof Tim WOO
In attendance:	Dr Ilari KAILA *(for agenda item #4)*	Ms Renee KOU
	Prof Ronald LAU *(for agenda item #6)*	Dr Sai Lok NAM
	Prof Huamin QU *(for agenda item #7)*	Miss Theresa TAM *(for agenda item#10)*
	Dr Trevor WEBB	
Apologies:	Mr Chung Tat CHOR	Mr Tung Wai CHEUK
	Mr Tony LAU	
Secretariat:	Ms Anne LUK	

Action

Welcome

1. The Chair extended his welcome to three new student members, namely Mr CHOR Chung Tat (SSCI), Miss LOK Wing Yau (SBM) and Mr CHEUK Tung Wai (SHSS).

Confirmation of the Minutes of the 165th Meeting Held on 16 September 2020 and the Special CUS Meeting on 25 September 2020

2. The minutes of the 165th meeting held on 16 September 2020 and the Special CUS Meeting on 25 September 2020 were confirmed as accurate records of the meetings.

Matters Arising from the Last Minutes (CUS 45/20)

3. Members noted that Senate at its 6 October 2020 meeting gave provisional approval for the Initial Proposal for the "Extended Major" Framework and the New Program Choice under the Framework.

Final Proposal for the New Undergraduate Minor Program in Music and Creative Arts (CUS 46/20)

4. Dr Ilari KAILA gave a short presentation on the final proposal, including responses to the comments from CUS as follows:
(a) HUMA 2104 *Music Theory I* and HUMA 3104 M*usic Theory II* retitled as

Music Theory I - Introduction to Tonal Music and *Music Theory II - Fundamentals of Harmony and Counterpoint* respectively to better reflect the course content. The former being a fundamental course and the latter was in the form of small seminar class with more hands-on focus; and

(b) Removed the pre-requisite requirement (*Music Theory I - Introduction to Tonal Music*) for *Music Theory II - Fundamentals of Harmony and Counterpoint.*

5. Dr KAILA further explained the relationship between the two courses. The courses were sequential in the sense that *Music Theory I - Introduction to Tonal Music* would be essential to prepare students for *Music Theory II - Fundamentals of Harmony and Counterpoint*; and there would be no point for those students who had taken *Music Theory II - Fundamentals of Harmony and Counterpoint* to take *Music Theory I - Introduction to Tonal Music*.

6. As the final proposal had addressed all the key concern raised by the CUS, the Committee resolved to recommend the introduction of the proposed Undergraduate Minor Program in Music and Creative Arts to the Senate for approval.

Initial Proposal for the New Undergraduate Minor Program in Literature and Creative Arts (CUS 47/20)

7. Dr Sai Lok NAM shared a video of Prof Sheng Qing WU giving a short presentation on the program:
   (a) The program aimed to help students to develop the critical skills necessary to analyse and appreciate literary text; enhance their critical thinking ability and ability to express themselves in an effective way. The program would be a good opportunity for students to work with internationally renowned writers to gain hands-on experience to substantially develop their Chinese writing skills, which would be important for students' intellectual, emotional and career development in the future;
   (b) Benchmarking against local and overseas universities suggested that full-fledged universities would always offer creative writing major/minor/concentration. The survey conducted last year indicated that majority of students had expressed interest in creative writing and art courses;
   (c) Students would need to take one required course (out of three) and five Literature and Film Fundamental and General Creative Art or Music electives;
   (d) All required courses would be conducted mainly in Chinese/Putonghua, as no English resources were available. Literature and Film Fundamental electives would be conducted mainly in English, with the exception for some courses on Chinese Literature; and
   (e) It was anticipated that there would be 30 students each year. The program team would review the demand in three or five years' time.

8. CUS had the following comments:
   (a) The title of a program should tell students what the program is about (i.e., what is expected from the students). The proposed title was not an accurate reflection of the program as:
      i. The program had a strong emphasis on Chinese creative writing; and

     ii. Students could take as few as one General Creative Arts or Music elective. It might not worth including this area in the program title.

(b) The program title overlapped with "Music and Creative Arts", another Minor program of the Division. This might confuse students. A more distinct title would be needed as content-wise the programs were very different.

(c) Collecting feedback from students would help to decide the best title that could appeal to students and at the same time reflect the focus of the program.

(d) Changes to the program title might require respective changes to the program intended outcomes.

(e) Since the program had the aspiration to go beyond Chinese Literature in the future, and that students could choose courses with English as the medium of instruction (MoI) for the electives, adding an English required course might help to attract more students to enrol on the program.

(f) Clarification regarding the relationship between the 3-credit Chinese Communication course (which was not just about Chinese proficiency) and the required courses; and how they related to the Minor program would be needed.

9. Members' attention was drawn to the fact that Senate's approval would be needed for a specific course/program to be conducted in a language other than English. If CUS saw the need, the Committee could make conscious decisions to recommend the use of a non-English language as the MoI.

10. Members expressed broad general support for the initiative. The program team would be invited to include in its final proposal its feedback to comments from CUS.   HUMA/ SHSS

Major Program Changes to the BBA Program in Operations Management (CUS 48/20)

11. Prof Ronald LAU briefed members on the rationale for proposing the Supply Chain Management Option under the BBA program:
(a) The BBA program had a Business Analytics Option. However, some students found it too statistical- and quantitative- focused; and
(b) Supply chain management, being the strength of the department, had grown increasingly important because of the pandemic. Students had expressed interests in the Option and considered it useful for their future career.
(c) Under the current curriculum structure, students would be required to take two extra courses to fulfil the Option requirements.

12. It was noted that some Centre for Language Education (CLE) courses included in the proposal were outdated. The program team would be invited to update the information accordingly.   SBM/ISOM

13. The Committee resolved to recommend the changes to the Senate for approval.

[Post-meeting notes: ISOM updated the course information as shown in the Annex: Replaced LABU 2052 and LABU 2051 with LABU 2040 and LABU 2060; removed LANG 3069 and LANG 1112 (under Goals 1 to 3, 5 to 6 and 8); replaced MGMT 2120 with MGMT 2010 and MGMT 2130 (under Goals 1, 3, 7

and 8); and replaced ISOM 4770 with ISOM 3770 (under Goals 1 to 6).]

Final Proposal for the General Framework of Extended Major and the Extended Major Program in Artificial Intelligence (CUS 49/20)

14. CUS appreciated the many works IPO and the Schools had done to come up with a concrete final proposal within a short period of time.

15. Prof Jimmy FUNG gave a short presentation regarding the major changes made since CUS' review of the initial proposal, in particular, how the comments from CUS were addressed:
    (a) The program-based admission/major selection exercise quotas for "Engineering+AI" and "Science+AI" were revised as 150/30 and 40/40 respectively. The two types of admission would add up to 260 per year, accounting for 10% of the student population. The projection for 2024-25 would be close to 1,000 students on the program.
    (b) To prevent the program from turning into a technical one, IDPO 4110 *Practical Machine Learning* and IDPO 4120 *Ethics of Artificial Intelligence* were added.
    (c) During the Virtual Info Day 2020, around 1,800 registrants attended the Cantonese live session introducing the program; and around 360 for the English session. The audience demonstrated substantial interest in the program.
    (d) Students would take cross-disciplinary courses in their 2nd and 3rd year of study to prepare for the application and integration of Artificial Intelligence (AI) with their Majors.
    (e) Students would be required to take either IDPO 4990 *Interdisciplinary Capstone Design* or IDPO 4991 *Interdisciplinary Capstone Project.*
    (f) The grades obtained from the "X" requirements would be counted towards the Major Cumulative Grade Average (MCGA).

16. Members observed the following:
    (a) Experience from some Schools suggested that students might have difficulty enrolling on courses related to hot topics during their exchange overseas, as some universities might not open the classes to non-local students. Students should be advised to take AI required courses (and future "X"-related ones) at HKUST.
    (b) The total number of credits on AI electives might vary from Major to Major. Not all students would be required to take 9 credits. For instance, all Engineering Majors had a 6-credit Final Year Project (FYP) which contained AI elements, of which 3 credits were Major-related and 3 were AI-related. These students could then take only 6 credits of AI electives.
    (c) Demand for FYP supervisors could be a bottleneck hindering the smooth implementation of the program. Prof Huamin QU supplemented that the issue could be resolved as faculty from the Guangzhou Campus could rotate in to help to supervise the students.

17. Members expressed an overall support for the proposal. Subject to Senate's approval for the "Major+X" Framework, future approval for "Major+X" programs would be delegated to CUS. To better prepare for the coming admission round, IPO would be invited to coordinate with the Schools, especially those with School-based admission, to start planning for the next "X"

IPO

that would best fit them. Ideally, more details could be available for further discussion at the April 2021 CUS meeting.

New Course and Major Course Changes (CUS 50/20)
New Common Core Course (CUS 51/20)

18. No request for un-starring of the agenda items were received. With an understanding that all proposals were fully examined by the CUS Secretariat and the Committee on Undergraduate Common Core Education Secretariat (for Common Core courses), the Committee approved all course proposals without further deliberation at the meeting.

    [Post-meeting notes: HUMA informed the CUS Secretariat on 20 November 2020 that there was a typo in the course proposal. HUMA intended to offer the course in Spring Term 2020-21 instead of 2021-22.]

    Initial Proposal for the Revised Undergraduate Common Core Program (CUS 52/20)

19. Prof Anirban MUKHOPADHYAY gave a presentation on the revised framework for the Undergraduate Common Core Program:
    (a) The Steering Committee on Review of the Common Core, set up in April 2019, was tasked to conduct a review of the existing Common Core Program. The Committee reviewed the objectives of the program, HKUST's and societal expectation on graduate attributes as well as General Education review reports of overseas and local universities.
    (b) The following major issues were identified:
        i. The program did not serve the objective of developing intellectual breadth beyond a single discipline, partly because students chose courses related to their Majors; and partly because of the double-counting of credits mechanism;
        ii. Competency outcomes were not well assessed;
        iii. Lack of pre-requisites led to low commonality of experience. The program had no identity and students did not know why they had to "waste" these credits (or time); and
        iv. Flat/declining scores in Annual Assessment of Graduate Attributes and Information Literacy Tests (classes of 2019 & 2020).
    (c) The revised framework proposed by the Steering Committee took into consideration the following factors:
        i. Addressing major issues identified;
        ii. Alignment with the University's priorities to broaden learning experience and overcome academic boundaries as set out in the University's Strategic Plan for 2021-2028; and
        iii. The University Grants Committee's requirement for universities to report on their effort in developing students' skills and attitudes, meeting the society needs as a whole and supporting students with mental issues.
    (d) Major changes proposed to the framework included:
        i. Reduction of credits from 36 to 30 with no double-counting of credits;
        ii. A three-tier scaffolded structure would be adopted
            - Foundation level (15 credits): *Critical Thinking and Data Literacy* and *Habits, Mindsets, and Wellness* coursed added on top of the

existing English and Chinese Communication courses.
- Broadening level (12 credits): introduction of the new Creative and Computational Arts area; removal of Quantitative Reasoning area; splitting of Science and Technology into two areas and introduced program-specific exclusions based on "home area"; and
- Experience levels (3 credits): a choice of four different cross-disciplinary experiential opportunities (UxOP).

20. Members were informed of some common questions raised at different occasions during the consultation progress. For instance:
   (a) Differences between the critical thinking element embedded in existing courses covered by the Majors/Minors and the Common Core Program: it was explained that the latter targeted average students and focus on transferable competency.
   (b) Differences between HLTH 1010 *Healthy Lifestyle* and the proposed 3-credit *Habits, Mindsets, and Wellness* course and the scaling up: the latter integrated the desirable elements of the former into an academic framework. Though similar materials would be used, the new course would be delivered in a more systematic way.
   (c) It was not yet confirmed if double-counting of credits would be allowed for Minors.
   (d) UxOP could be taken in Year 3, hence it would be less demanding as compared to the current arraignments. The four different UxOP choices aimed to cater for the demand of 2,500 students.
   (e) The Undergraduate Core Education Office would review the course offerings under the Broadening section, based on the scaffolding developed.

21. Further elaboration was provided for the UxOP. Since the new UROP would bear 3 credits, on top of the research work conducted (regular research like the current UROP arrangements), students would be required to share with others their work via small cross-disciplinary workshops and presentations. Students would be graded based on their reflection. It would be a bit difficult to ascertain the demand for the four streams at the beginning. Information on the number of students engaged in UROP, internships, mentorship/outreach, etc., would be a good reference point. Following the current trend, if around 100 students opted for UROP, the other three streams might have an average of 800 students. Since some faculty had already expressed interest in leading theme-based projects, it was optimistic that there would be sufficient faculty to support the UxOP.

22. The revised program would be a major change in the University's approach. It would help the University to deliver a quality Common Core Program, which the University intended to achieve years ago. The successful implementation of the revised program would allow the University to communicate with the students clearly their progress of specific competencies (e.g., teamwork, academic literacy, learning to learn ability, communication skill, etc.). This might enhance students' recognition of the value of the Common Core Program; and reduce reliance on the CGA.

23. CUS expressed positive support for the initiative with the following comments:
   (a) Though UxOP would only be implemented three years from now, pilot testing was considered crucial to better prepare for the large-scale implementation, as it might take more than one trial run to iron out possible

problems.

(b) Mechanisms should be in place to ensure consistency of grading across the four UxOP streams.

(c) There should be clear indication about the party responsible for evaluating the Common Core courses.

(d) It was noted that students could choose from a range of activities for the *Habits, Mindsets, and Wellness* course. Students with special needs could be given exceptions according to the prevailing practice, should the Department see fit.

(e) The workload for UxOP arrangements, in particular, the matching of students with the theme-based projects as well as internships would be substantial. The Senior Management was aware of the potential resource implications.

(f) Given that students would be required to take the Foundation courses in Year 1, this might pose pressure on class timetabling. Measures such as adoption of sub-sessions for the courses and pre-assigning of courses might need to be explored. The said requirement might also affect the arrangement of some Majors which required students to take a certain number of foundation courses during the first year of study.

Proposed Revisions to the Regulations for Examinations (CUS 53/20)

24. Prof Anirban MUKHOPADHYAY briefed members on the background of the paper:

(a) In view of the increasing number of cheating cases in connection with online examinations, the Associate Deans considered that there was a need to formulate regulations specific to online examinations for staff and students' reference.

(b) The revised regulations were endorsed by the Committee on Teaching and Learning (CTLQ) via circulation on 10 September 2020 for Senate's approval at its October 2020 meeting, aiming for implementation by mid-term.

(c) Senate Secretariat subsequently advised that the endorsement from the CUS and the Committee on Postgraduate Studies would be needed before consideration by the Senate.

25. CUS considered the revised regulations necessary to facilitate the operations at departmental level and to manage the different appreciations about cheating among students. Members resolved to endorse the revised regulations.

Support for Students with HKDSE Chinese Language Subject below Level 3 (CUS 54/20)

26. The University Admissions Sub-committee (UAS) observed an increase in the number of students admitted with a HKDSE result of below Level 3 for the English/Chinese Subjects. CUS was therefore invited to consider if there would be a need to review the University's current support for students' proficiency, especially for Chinese.

27. Prof Melinda WHONG supplemented that there was more support for English training because students were required to study in English. The assumption for Chinese seemed to be different. Subject to CUS agreeing with the logic, CLE

could re-think the Common Core options to offer a wider or more interesting set of courses so that the training would not focus only on increasing the level of proficiency. While Members did not have any views on the matter for the time being, CLE welcomed suggestions after the meeting; and would bring in more new courses for discussion in the future.

Amendment to the Subject Requirement for JUPAS Admission to BSc in Mathematics and Economics (MAEC) via Program-Based Admission (PBA) (CUS 55/20)

28. Members received a recommendation from the UAS for a proposal from the School of Science to consider the HKDSE Integrated Science subject as an Elective 2 rather than Elective 1 subject requirement for BSc in Mathematics and Economics (MAEC). Members agreed to approve the recommendation to take effect from the Fall 2021-22 admission round.

Items for Information

29. The following papers were presented to Members for information:
    (a) **Annual Report on the Work of the Committee on Undergraduate Core Education from 1 July 2019 to 30 June 2020 (CUS 56/20)**
    (b) **Annual Report on the Work of the Undergraduate Admissions Sub-Committee from 1 September 2019 to 31 August 2020 (CUS 57/20)**

30. The following paper would be available for information to Members upon request:
    (a) **Course Deletion and Minor Changes to Courses and Programs (CUS 58/20)**

Any Other Business

31. Members were informed that the Chair, on behalf of the Committee, approved on 6 November 2020 the retention of MATH 4333 *Mathematical Biology*, a sunset course deleted for the 2020-21 academic year. The Mathematics department advised that the course would be offered to the Applied Mathematics Track students in Spring 2020-21.

Date of Next Meeting

32. There being no other business, the meeting was adjourned at 12:10pm. The next CUS meeting was scheduled for 13 January 2021 at 9:30am.