There was an online meeting of the Biological Sciences Committee at 2 pm on Wednesday 2 December 2020

MINUTES

860. APOLOGIES FOR ABSENCE
Dr Holly Canuto.

861. MINUTES
Minutes of the meeting held on 14 October 2020 were circulated and approved.

862. PROPOSAL FOR NEW IB COURSE – MATHEMATICAL AND COMPUTATIONAL BIOLOGY
A proposal for a new IB course in Mathematical and Computational Biology was circulated as BSC.20.14.

This includes the following documents:
BSC.20.14a Mathematical and Computational Biology approval form
BSC.20.14b MCB Details of content
BSC.20.14c IB MCB Class schedule
BSC.20.14d MCB Programme specification
BSC.20.14e MCB survey IA students filtered
BSC.20.14f MCB survey IA students all responses
BSC.20.14g MCB survey IB students filtered
BSC.20.14h MCB survey IB students all responses
BSC.20.14i MCB survey II students filtered
BSC.20.14j MCB survey II students all responses
BSC.20.14k MCB survey III students filtered
BSC.20.14l MCB survey III students all responses
BSC.20.14m IB Mathematical and Computational Biology costs
BSC.20.14n Marking and classing scheme IB MCB
BSC.20.14o Regs changes NST Part IB Mathematical and Computational Biology

Professor Richard Durbin attended the meeting to introduce the paper and answer questions.

The Committee anticipated the course would be a very welcome addition to teaching in the Natural Sciences Tripos. It was noted that there was a review of teaching in the biological subjects for Part IB NST, but this course would remain as a standalone course in whatever new structure was adopted.
Of concern was that this would be the first NST Part IB to have restrictions on the numbers of students that could take the course. This was necessitated by the limited size of the Bioinformatics suite that would be needed for computational lectures and the practical classes. The Committee thought it would be useful to have greater clarification on what the entry requirements were (i.e., the 50% mark in IA Mathematics or IA Mathematical Biology was a minimum requirement) and how students would be selected for the course should numbers who wanted to study exceeded available places. It may in future be possible to accommodate larger numbers of students if some of the teaching was delivered online.

With respect to the selection criteria, it was agreed this would be based on ranking in IA Mathematics or IA Mathematical Biology. This metric would need to be clearly described for the benefit of DoS and students.

The course literature would need to make it clear to students what computer specifications would need to be available to access the course and that these should not be a barrier to participation. Prof Durbin clarified that the materials would be accessed via a browser, so a very high specification would not be required.

The Committee thought it would be useful to check Departmental Directors of Teaching were aware that staff has committed to teaching on this course to ensure that the course was well resourced and would not have rapid turnover of lecturers while it was being established.

It was noted that supervisions would be organised by the Course Management Committee in a similar way to the IB Plant and Microbial Sciences supervisions.

The workload would have to be closely monitored – there were seven practicals per term and two mini-projects to complete. Two of the practicals were for work on the mini projects. Students would be expected to attend all of the practical sessions.

These concerns aside, the Committee were happy to approve the proposal and recommended it to the NST Management Committee and the Faculty Board of Biology.

**ACTION:** secretary to forward proposal to the NST Management Committee and the Faculty Board of Biology.

863. MATTERS ARISING

863.1. Examinations data retention policy (850.3)

The Faculty Board had agreed to update its examination data retention policy such that examiner’s comments should be destroyed immediately after the final
meeting of Examiners. However, GBEC, under instruction from the Office of the Independent Adjudicator, have just agreed to overhaul the University data retention policy. This was likely to require much more retention of examination data than previously. Further guidance was expected soon but it was emphasised that any changes would affect the post-examination procedures so should not disrupt preparations for examinations.

863.2. Admissions (853)
Dr Paul Elliot reported on admissions data. Numbers were slightly up by 25; this should not overburden colleges or departments. Twenty were EU and 124 were from overseas. The admissions assessment had changed in that there were fewer subjects taken – maths plus one of biology, chemistry or physics. Applications were being received via the Hong Kong University (HKU) scheme, whereby students could spend two years at HKU and then apply to join NST Part IB at the University. It has been ascertained that these students would have covered material that would make them well prepared to enter at Part 1B. It was anticipated that some HKU students would be joining the Part IB course over the next few years.

863.3. Online teaching for 2020-21 (858.1)
Departmental representatives were asked to report on their experiences of providing online teaching in the Michaelmas term.

The Department of Psychology had conducted a feedback survey of their students. Overall student satisfaction was good, finding pre-recorded lectures less ‘effortful’ but more boring, less engaging, more useful and more ‘lonely’ than live lectures.

The Department of Physiology, Development and Neuroscience had found that their medics and vets were happier than their NST students, perhaps because the medical and veterinary courses had more in-person teaching than the NST. It would be good to arrange for in-person teaching for NST students as far as possible and allowable in the next term. Other than this the students were mostly happy, although it was noted that some students were taking far too long studying pre-recorded lectures – some spending four hours on a one-hour lecture.

The Department of Veterinary Medicine noted that their lecturers were asked to re-record their lectures if they went over time. Some lecturers had broken their lectures into smaller thematic chunks. There were plans for more blended learning in future years.

The Department of Biochemistry reported that students were mostly happy although there were some issues with timing of release of recorded lectures. Part IB students would like access to their lectures sooner. The Q&A sessions
organised after all sessions were popular and there was good student engagement.

The Department of Pharmacology had similar experiences to those above. They had split their lectures into smaller sections, as long as the material was relatable and did not run over time students were happy. Students had expressed a desire to return to in-person lectures for social reasons, but also liked having recorded lectures available. Students with additional needs particularly appreciated having access to recorded lectures.

With respect to breaking lectures down into smaller segments different feedback had been received from various sources. It was recommended that there be clear labelling of segments so students knew what to look for and in what sequence – organisation of the material was seen as critical for students to be able to use it properly. The vets had insisted on a clear schedule of release of recorded lectures so students could plan their studies; a whole weeks’ lectures were released on the Monday morning of that week.

864. DIGITAL TEACHING
Dr Scadden reported. Resources had been added to the Moodle site to assist with recording lectures. Anticipated appointments of a Faculty online learning administrator and the University appointments of online learning administrators were not yet in place but any ongoing developments would be reported as they happened.

It was stressed that departments needed to be mindful of the overall hours of learning their students would require to get through the various online teaching resources, and not overload them. There were reports of students being exhausted by the amount of learning they had been able to do, without the usual recourse to social activities available to relieve this.

865. PART II BBS
865.1. Student Consultative Committee
This had met on 20 November. Students were generally happy with the course but there was a request for more guidance on structuring dissertations. Current BBS dissertation guidance can be seen at https://www.biology.cam.ac.uk/undergrads/nst/bbs/dissertations. It was not clear at the Consultative Committee meeting what extra guidance the students needed. Students would be best advised to talk to their supervisors. It may be that at the date of the Consultative Committee students had not yet had an opportunity to meet with their supervisors. Perhaps guidance should be given to students and supervisors about when to have a first meeting.
A peer-to-peer forum had been requested – this was a sensible idea but was probably best organised at an individual course/department level.

866. ONLINE EXAMINATIONS WORKING GROUP
It was noted that the group had met on 23 September and another meeting was planned for January 2021. Proposals for NST biology examinations in Easter 2021 were submitted to GBEC in October and were approved.

867. NST MANAGEMENT COMMITTEE
Minutes of a meeting held on 13 October 2020 were circulated as BSC.20.15 and noted.

868. PNB MANAGEMENT COMMITTEE
Minutes of the PNB Management Committee meeting held on 15 October were circulated as BSC.20.16.

To note that it had been agreed students would no longer be able to take all of their modules from a single department. This would be in effect from October 2021, see below.

The project component had been changed for the Easter 2021 examinations such that a 4000-word grant proposal was to be submitted at the beginning of the Lent Term and a 4000-word project submitted in the Easter Term. Some students and supervisors were apparently unaware of this change in spite of communications from the Course Management Committee. A meeting with the Course Management Committee would be held with the Chair, Dr Weil and Dr Summers soon to try and resolve this issue. It was noted that this was an urgent situation that needed resolving as soon as possible so that students were not disadvantaged.

869. DOBS COMMITTEE MEETING MINUTES
It was noted that no further meetings had taken place since the meeting held on 22 September. Minutes would be circulated for the next BSC meeting.

870. PROPOSAL FOR CHANGES TO PSYCHOLOGY TEACHING IN THE NST
A proposal for changes to the teaching of psychology in the NST and Psychological and Behavioural Sciences (PBS) had previously been brought to
the Committee in March 2020. Further information was requested at the March meeting and now the following were circulated:

**BSC.20.17a** detailing further information requested by the BSC.
**BSC.20.17b** a summary of the proposals to change the structure of psychology teaching.
**BSC.20.17c** descriptions of new courses.
**BSC.20.17d** student selections of PNB modules over years.

Students taking PBS would now be offered some elements of the NST IB Psychology course. The overall restructured course would improve efficiency for teaching and examinations by essentially running everything through the PBS Tripos. The Department of Psychology was keen to continue to contribute to the NST IB Neurobiology course and also to any restructured courses following the review of biology teaching for NST Part IB. There would be no NST Part II Psychology course, but students could transfer to PBS for the Part II year. The department would continue to offer PNB projects and BBS dissertations.

It was agreed to take this proposal forward to the Faculty Board of Biology.

**ACTION:** secretary to forward proposal to the Faculty Board of Biology.

871. FORM AND CONDUCT NOTICES AND REGULATION CHANGES

Departmental representatives were asked to remind their Teaching Committees that form and conduct notices for the Easter 2021 examinations should be submitted to Jane Clare ideally by the end of Michaelmas term (4 December).

871.1. Regulation change for Part II PNB course

A request to change the regulations for the Part II PNB course to take effect from the academic year 2021-22 was circulated as **BSC.20.18a**. These added a requirement that a candidate could offer no more than three written papers from the same department, and that submitted work consist of a 4000-word grant proposal and a 4000-word research dissertation.

The Committee approved the change.

**ACTION:** secretary to forward regulations change to NST Management Committee and Faculty Board of Biology.

871.2. Form and conduct notices for Part II PNB

A form and conduct notice for the Part II PNB examinations to be held in Easter 2021 was circulated as **BSC.20.18b**. This asked for the submission of a 4000-word grant proposal and a 4000-word research dissertation as per the approved request made to GBEC in October. There had been some issue in
communicating these changes to supervisors and students (as noted at 868) and therefore the Committee asked that the PNB Management Committee agree on a way forward that would not disadvantage any student.

**ACTION:** PNB Management Committee to discuss options with Deputy Head of School for Teaching and Chair.

872. **A.O.B.**
There was none.

873. **DATE OF NEXT MEETINGS**
The next meeting would be scheduled for the end of Lent term.