Internal Periodic Review of: School of Mathematics UG & PGT
Date of review: 27-28 March 2023
Date of 14 week response: 17 October 2023
Date of year on response: 11 July 2024

The School/Subject Area is responsible for reporting on progress with all recommendations, including those remitted to other areas of the University for action.
 If any recommendation has been fully addressed please record the action taken and date completed.   Any barriers to progress should be highlighted on this report.

Recommendation no	Recommendation	Timescale for completion	Comment on progress towards completion and/or identify barriers to completion	Completion date
1	**Assessment & Feedback** The review team **recommend**, as a priority matter, that the School review the thread of assessment throughout programmes to relieve the pressure on students (where appropriate) avoid the clustering of deadlines, and ensure that the credits to course hours ratio is proportionate	AY 2023/24	The School's recently completed review of our pre-Honours curriculum systematically addressed staff and student workload due to continuous assessment. A set of eight courses (one with an instance in each Semester), three of which are for Year 1, one for Direct Entry, and four for Year 2 were approved. The course proposals had some indicative coursework schedules, which in many cases are significantly reduced in volume from those in our current offering. We have also begun to develop an archetype assessment regime for courses, depending on their course work/exam ratio. The courses will be designed in full during the next academic year, and we will ensure (as far as possible) that deadlines do not cluster and that the credits to course hours ratio is proportionate.	AY 2023/24
	The review team **recommend** that the timetabling service provide schedules in a timely manner, to allow Schools to better plan and communicate with students about examinations.	AY 2023/24	The Exams Review work, noted in the 14-week response, transitioned to oversight by the Student Lifecycle Management Group in January 2024. Work has focussed on (1) stabilising the existing service and (2)clarifying roles/responsibilities/processes across the Schools/Exams team/Disability & Learning Support Teams and other support services. This work is still on-going but seeks to create shared and achievable timelines for Schools and the Exams team.	AY 2023/24

				This aims to support the more efficient creation of the timetable, as well as to minimise the changes to student exam timetables post-publication. We have also restructured the exams team to separate the management of the exams operation from the exam scheduling. The new exam timetabling system has now been used for four exam diets. (Aug and Dec 2023, May and August 2024). Over this period there has been a period of bedding in of the software and close collaboration with the software provider to ensure the software delivers what is needed. Scheduling has become more efficient and so has allowed longer for Schools to check timetables post publication. This, again, seeks to ensure that timetables are stable when published. The exam timetables for 2023/24 were published on the dates advertised.	
2	**Remit item 2: Best use of technology** The review team **recommend** that the School roll out their technology enhanced curriculum plans, once developed, in their own timeframe, whilst working in line with the known principles and guidance of CTP.	Ongoing		The School's technology enhanced curriculum plans are currently being shaped following our recent review of our pre-Honours curriculum. Our new pre-Honours courses have not yet been designed in detail, but the intention is that all courses will make use of online resources, including videos and Piazza. Most courses will include some automated assessment and feedback (using STACK). Our Modelling and Computing course will introduce students to industry-standard programming and code development tools. A working group has been created to develop guidelines for the use of AI in teaching and learning.	Ongoing
	The review team **recommend** that the School include standard archetype course models, utilising STACK where appropriate.	Ongoing		Pre-pandemic the School had well-developed archetype course models. We intend, through the parallel School reviews of pre-honours and the University curriculum transformation project, to return to their systematic use across the School. While we expect there will be some exceptions (e.g., project modules, and modules with placements such as mathematics education) standard archetype course models do provide welcome consistency to students. During the pandemic we made a much wider use of	Ongoing

			online assessment, including STACK and other tools, based on experience with courses such as Fundamentals of Algebra and Calculus. These approaches to teaching will have enduring value as part of a balance of different practical methods.	
	The review team also **recommend** that a role, or space in the existing WAM tariff for an academic member of staff, is created to lead on this and is well supported by School management.	Ongoing	The School has one academic staff member devoted 50% to writing STACK questions, and another as a Learning Designer. Further development of standard archetype course models will involve appropriate staff development and follow-up.	Ongoing
	The review team **recommend** that a training and learning process is in place to facilitate competency in digital pedagogies and to encourage knowledge sharing amongst staff.	Ongoing	An academic staff member leads on staff development in the School. He is preparing a plan for the School Management committee, which is expected to include plans for staff development of both digital pedagogies and formal/informal mechanisms to encourage knowledge sharing amongst staff.	Ongoing
	The review team **recommend** that the School reviews its equipment and facilities to make sure hybrid teaching and the proposed technology enhanced curriculum is properly equipped (in particular, lecture capture).	Ongoing	This issue is under review. Equipment for lecture capture will remain a University policy/practice within standard teaching room setups. We recognise that more than this might be needed for certain MSc programmes (where distance participation is specifically encouraged).	Ongoing
3	**Employment of Tutors** The review team strongly **recommend** that the School reviews the tutoring commitment required for the next academic year to ensure that tutoring is properly resourced.	AY 2023/24	The way the School deals with tutoring has evolved over the past academic year. To meet current needs, we created the role of one-year, Grade 6 Full Time (FT) University Tutors. Six such appointments have been made for the academic year 2023-24. Another round of appointments has now been made. Recruitment and line management of these positions is the responsibility of the Deputy Director of Teaching (Resources) to ensure that they have adequate training and support.	AY 2023/24

	The review team also **recommend** that the School develop a long-term plan for their use of tutors, both to ensure appropriate resource is in place and to avoid undue pressure on the Teaching Office as it plans for each year ahead.	AY 2023/24	An overhaul of our tutor management system is in progress. Marking hours for tutors were previously out of line with workload, so this has now been corrected. Tutor training has been improved with a focus on addressing issues that surfaced in the previous year, and all tutors now undergo a review/peer-review process each year. The tutor café has been introduced, where the tutors can discuss issues around their tutoring and receive advice. The issue of pressure on the Mathematics Teaching Office (MTO) due to tutor management is currently being reviewed. We are considering the possibility of a new appointment, should finance allow, and/or a redistribution of administrative responsibilities within the MTO.	AY 2023/24
4	**Curriculum mapping** The review team **recommend** the School undertakes a review of the co-ordination of delivery, especially at postgraduate taught level, to consider mapping of prerequisites across courses & programmes.	AY 2023/24	Programme Directors have been asked to review course descriptions and requirements to ensure that pre-requisite requirements across courses are appropriate, coherent, and complete. Mapping of pre-requisites across courses and programmes were carefully considered in our recently completed review of our pre-Honours curriculum and will be further considered during the imminent review of our Honours curriculum.	AY 2023/24
5	**Remit item 1: Student Employability** The review team **recommend** that the School brings conversations around employability further into the curriculum.	AY 2023/24	Skills development, and the associated transition from school to university, were key considerations in our recently completed review of the pre-Honours curriculum. An entire 20 credit Year 1, Semester 1 course has been dedicated to transition and skills development (and to introducing students to some university-level Maths). Skills development is also a strong focus of Modelling and Computing in Year 2. The other Pre-Honours courses will help to maintain and enhance these skills through mastery-based assessment and consistent levels of expectation.	AY 2023/24

			Involvement from the Careers Service has also been embedded in the curriculum through introductory sessions in Year 1 and reflective learning in Year 2. Our academic cohort leads are also encouraged to discuss employability issues with their cohorts. Skills development will be a key consideration in our imminent review of our Honours curriculum.	
	The review team also **recommend** that the School, in order to better understand industry requirements and to build industry partnerships, create an industrial liaison board and involve the Student Voice in this activity.	AY 2023/24	The School now has an Industrial Advisory Board which exists to facilitate liaison between the School's teaching and staff and the private sector. The Board comprises industrial, academic and student representatives; it is proposed that student representatives could continue on the board for up to 3 years after their studies. The inaugural meeting of the Board will take place in the coming academic year.	AY 2023/24
	The review team **recommend** that Student Systems and Insights work with the Careers Service to develop a data management system that allows for better targeted support for students.	Ongoing	Student Systems' Analytics, Insights and Modelling Team will work with the School and the Careers Service to understand in more detail their requirements in this area. Progressing this work has not been prioritised within the Registry Services portfolio due to other demands. However, it has been added to a backlog of activity to progress when resource is available.	Ongoing
6	**Recruitment / pre-arrival**			
	The review team **recommend** that space be created in the WAM tariff for an academic roles' involvement in UG recruitment, and work with the relevant Professional Service staff on recruitment and admission activities.	Ongoing	We plan to incorporate responsibility for UG recruitment into the Director of Teaching team, giving overall oversight to the Director of Teaching, and workload allocation for one of the Deputy Directors of Teaching for the operational requirements of this work.	Ongoing
	The review team **recommend** that the School review communication of material with PGT students at pre-arrival stage and include details of the list of software to be used so that students are better prepared.	Ongoing	Following the full implementation of the new student support model in 2023-2024, the Director of Teaching, Head of Student Services, and appropriate additional colleagues will review all pre-arrival and welcome week activities across the whole taught programme. A review of communications to PGT students, including about software requirements, will be an explicit item.	Ongoing

7	**EDI Development** The review team **recommend** that the School and College allocate resource to EDI development in order to best support ongoing work and activities.	AY 2023/24	There was a review of EDI in the College, led by the Dean of Systematic Inclusion. As a result of this the College appointed an EDI Manager, Jenni Sarafilovic. She is responsible for supporting commitment to foster a diverse, inclusive, and equitable environment across both staff and students in the College. She has been in post for 1-2 months.	May 2024
	Please report on steps taken to feedback to students on the outcomes of the review		The outcomes of the review were presented and discussed at the meetings of the School Teaching Committee which has student representation.	
For Year on response only	Any examples of a positive change as a result of the review		The review provided an impetus for the creation of School's Industrial Advisory Board.	