Programme change proposals

At York each degree programme has its own, tailored set of distinctive learning outcomes. These won't change, no matter what your location or mode of delivery, and our academics are working hard to ensure your programmes and modules next year continue to inspire and motivate you.

Your health and safety is our number one priority and in light of the Covid-19 pandemic we have needed to make changes to some of your programmes of study for the coming academic year. This document summarises the changes that are proposed.

Programme(s)	BSc Mathematics (3 year) BSc Mathematics and Statistics (3 year) BSc Mathematics with a year in Europe (4 year) MMath Mathematics (4 year) https://www.york.ac.uk/students/studying/manage/programmes/programme-specs/undergraduate/mathematics/

Summary of Overall Plans
We have managed to keep our current programme structure pretty much complete for all the single-subject students and for all the mathematics modules for joint-subject students, including Natural Science students. Following university guidance, all lectures (at least for Autumn Term) are online and run asynchronously. Additionally, all our fortnightly whole-class Problems Classes will also run online, asynchronously. Although we are no longer permitted to lecture face-to-face (f2f), our plans permit us to have in-person f2f support teaching for all years and almost all modules. The exceptions are where there are either pedagogical reasons for not having f2f contact (such as computer practicals, where social distancing removes any practical benefit of them) or for staffing issues (such as when the lecturer is shielding). Many of these support sessions will be much smaller than they currently are, allowing for more personalised bespoke teaching, and some (namely those for *Calculus* and *Algebra*) will be larger, run more as worked example classes. These larger seminars are known to work effectively at other universities. A typical module currently runs on a fortnightly basis of lectures + small-group seminars, followed by lectures + whole-group problems class. We are not planning on changing that, as it works well and is embedded in our culture. For each taught module, we will add an additional support class in the form of an online office hour with the lecturer.

First year

If you are a first year single-subject student, you will have a very small tutorial (with approximately five students) every fortnight for the core module *Mathematical Skills 1*. The tutorial, which is typically with your academic supervisor, will help you build the necessary skills to be a successful professional mathematician. You will have a larger seminar every week alternating between two other year-long modules, *Algebra* and *Calculus*. In Autumn Term, there is an additional core module, *Introduction to Probability and Statistics*, for which you have weekly seminars and online practical classes supporting your learning of the statistical programming language R. In Spring and Summer Terms there are two other core modules, *Real Analysis* and *Introduction to Applied Mathematics* similarly supported by regular seminars. In addition, for each module each week you will have the opportunity to meet the lecturer via an online office hour.

First year Natural Science and Actuarial Science students have weekly very small (5 people) seminars in their module *Mathematics for the Sciences 1* in Autumn Term. They have an additional opportunity to interact with the lecturer in a weekly online office hour. This continues into Spring Term with *Mathematics for the Sciences 2*, also supported by a weekly seminar and office hour.

Second year

If you are a second year single-subject student, you take two big 40-credit streams spread across the year, supported by regular small seminars. There are three other core modules (*Linear Algebra*, *Vector Calculus*, and *Functions of a Complex Variable*) each supported by regular fortnightly seminars. In each module (or in each component of the big streams) you also will have weekly access to the lecturer via new online office hours.

Finally, you will take *Mathematical Skills 2*, which will be taught entirely online due to the practical difficulties of providing coding support with regular synchronous support during Autumn Term, and varying support structure (depending upon your chosen option) during Spring Term.

Third year of MMath

If you are in your third year of an MMath degree, then you typically take five modules per term plus a year-long group project. Each taught module is supported by a seminar, run fortnightly, although a few computational modules are being run online only. Additionally, for each module you will have weekly access to the lecturer in an online office hour.

Final year

If you are a finalist student (either H- or M-level), you typically take four modules per term plus a year-long project. Each taught module is supported by a seminar, run fortnightly. In addition you will have weekly access to each lecturer in new online office hours. A few computational modules are being run online only.

Online provision

Depending on the size of the module and the number of people who are unable to make f2f classes, we will either run equivalent online seminars or else provide the support via the office hour with the lecturer. We will initially assume everyone is going to be on campus, and will schedule you for f2f seminars. If we are informed you are not able to attend campus, we will transfer you to an equivalent online support class. Conversely when you manage to finally get to campus, we will move you back to your scheduled f2f class.

Summary

We are excited about our current plans for next year. We have managed to preserve the structure of the current programme which we know works well, and increase the number of support classes each student receives, as they continue to get the same number of seminars as currently, but have access to additional timetabled office hours. Some of the seminars will be considerably smaller than what they would have had, although others will be larger to compensate.

Programme Structures

It has been necessary to remove the new Spring Term module *Algebraic Topology* from the 2020/21 teaching schedule. If you were planning on taking this module, you will be contacted about your module choice before the start of the year.

We are not planning any other major programme changes in terms of withdrawing or altering mathematics modules.

Further changes or information of note

We will continue to assess students through a combination of coursework and exams, depending on the module. Details of assessment plans for each module will be available by the start of term.

By keeping our programme structure intact and ensuring the material we teach on the module and the learning outcomes we assess remain unchanged, we do not envisage any issues with our accreditation with the *Institute of Mathematics and its Applications* for the single-subject programmes.

Students on the Mathematics with a Year in Europe programme may find that their study abroad plans are affected by the evolving situation. Students due to travel shortly will be supported in their decision-making, with tailored advice for each student's individual placement plans. Students entering the second year this year will need to allow for flexibility in planning of their year abroad for the following year.