



# MSC IN MATHEMATICAL MODELLING AND SCIENTIFIC COMPUTING 2021-22 Notice to Candidates

This circular contains information about:

- standardized marks (USMs) and classification;
- the format of, and procedure for, sitting exam papers in the MSc in Mathematical Modelling and Scientific Computing;
- how to scan your exam solutions for electronic submission;
- late submission penalties.

The full Regulations for the MSc in Mathematical Modelling and Scientific Computing examination are contained in the Examination Decrees and Regulations. Full particulars about the syllabus and other information can be found on the Mathematical Institute Course Management webpages which supplement the Course Handbook 2021-22 issued by the Mathematical Institute.

# Timetable

Hilary Term Examinations will take place on Thursday 13<sup>th</sup> January at 9.30am GMT and Friday 14<sup>th</sup> January at 9.30am GMT

# Trinity Term Examinations will take place on Thursday 21<sup>st</sup> April from 9.30am BST and Friday 22<sup>nd</sup> April from 9.30am BST

If you are unable to take a paper at the stipulated time for a religious or other compelling reason, you should ask your college to make the appropriate application on your behalf. Please do not ask the Examiners; they are powerless in such matters.

Prof Jon Chapman Chair of MSc in Mathematical Modelling and Scientific Computing Examiners December 2021

# **Format of Examination Papers**

# Paper A1: Mathematical Methods I

Paper B1: Numerical Linear Algebra and Numerical Solution of Partial Differential Equations

# Paper A2: Mathematical Methods II

Paper B2: Further Numerical Linear Algebra and Continuous Optimization

Each paper should be completed in 2 hours and 30 minutes, however, for online examinations, you will receive an additional 30 minutes for downloading and uploading your exam. This means you have a total of 3 hours from the time of download to submit your paper. Each paper consists of 6 questions (each question is marked out of 25). The rubric states "You may attempt as many questions as you like but you must answer at least one question in each section. Your best answer in each section will count, along with your next best answer(s), making a total of four answers."

# **Exam Platform - Inspera**

All papers will be sat as online open-book exams on the Inspera platform. There will be no in person exams in the 2021-22 academic year.

Please see the following link for more information on Inspera as well as the most recent guidance from the University of Oxford on Open Book examinations: https://www.ox.ac.uk/students/academic/exams/open-book

# **Practise Using the Inspera Platform**

Using the above link, you will be able to familiarise yourself with the new exam platform with access to the Inspera User Guide as well as a practice test.

Within the Inspera User Guide:

https://www.ox.ac.uk/sites/files/oxford/Inspera%20user%20guide%20for%20students%20-%20University%20of%20Oxford%20v2.5.pdf

there are step-by-step instructions on how to log into Inspera, as well as important information about Inspera features and functions. To log into Inspera you will use your SSO and multi-factor authentication. It is extremely important that you have set up your multi-factor authentication (MFA) method well in advance of the online exam. For details and guidance related to MFA, please see the following link: <u>https://projects.it.ox.ac.uk/prepare-mfa#tab-2511556</u>.

Inspera provides a practice test to ensure that you are familiar with the necessary features and functions to take your examination. The practice test can only be taken once . The practice test does not include any subject-specific material and is only designed for you to be able to practise all the core functionality you will need for your real exams. To take the practice test exam:

1. Log in to Inspera: https://oxford.inspera.com/ with your Oxford SSO (go through MFA as needed).

2. Your forthcoming exams will appear under My Tests (exams are called 'tests' in Inspera).

3. Please check that your browser is compatible with Inspera:

Inspera can be accessed on the following browsers: Microsoft Edge Google Chrome

Mozilla Firefox Apple Safari Inspera is tested on Windows, macOS and Chromebooks. The software is supported on each of the four browsers listed above. Safari is only supported on macOS only.

4. A practice test is available for you to practice on under 'My Tests'. The test is called 'Practice Exam'. As with the real exam, you will only have one attempt at the test.

5. If you want to practise uploading any part of the practice test response, you'll need to have read the guidance on scanning in the Inspera Student Guide beforehand.

6. Follow the instructions. If you'd like to read the Honour Code, right click on the link.

7. Once you're ready to begin, click Start test.

8. For the practice test, you have up to 3 hours so you will see what happens when you time out.

9. The clock will count down in the top left corner as you write your response.

10. Take a moment to browse around Inspera and get used to how it looks and feels.

11. Just as a reminder, when you submit your practice test response, it will not be reviewed or marked by anyone – this whole process is for illustrative purposes only to help you be examready.

We highly recommend you read through the Inspera guidance and take advantage of the practice test function to ensure you are thoroughly prepared to use the new exam platform at the official time of examination.

#### **Conduct of Examination Sessions**

All Exam papers in the 2021-22 academic year will be sat as online open-book exams on the Inspera platform.

The papers will be available on Inspera on the release dates and time outlined on the first page of this document. You will be provided more information on how to access the papers closer to the time of assessment.

To account for timezone differences, the exam will be open for download and submission for a 24hour period but you must sit the exam according to times listed below

If you are in the **UK or in the time zones GMT +2 to +7**: you should begin your exam at 09:30 UK Time

If you are in any **other time zone**, you can start your exam at any point from 09:30 UK Time, but must start not later than 09:30 local time (i.e. the country you are in when you take the exam) - (this may be the day after the UK start time if your time zone is ahead of GMT). This flexibility is to allow you to sit during daytime hours, if that is your preference.

The exam should take you **2 hours 30 minutes to complete**, and you will be allotted an additional **30 minutes for scanning and uploading your solutions and for any unforeseen technical difficulties**. Therefore, you are required to upload your paper within 3 hours of accessing it. **Submissions received more than 3 hours after accessing the exam paper will receive a score of 0**. Your exam time will start as soon as you log in to Inspera and click on 'start test'. Do not click this link until you are ready to start. This will be the equivalent of an invigilator saying 'You may turn over the exam paper now.'

There will be a countdown clock in the top left-hand corner with any approved extra time exam adjustments as well as 30 minutes' technical time. Once your exam duration has ended, Inspera will end your exam and automatically save any uploaded work.

#### Honour Code

When you submit your exam answers at the end of your open-book exam, you will be asked to agree to the following pledge: I acknowledge the University Honour Code and I hereby confirm that the submitted work is entirely my own and I have not (i) used the services of any agency or person(s)

providing specimen, model or ghostwritten work in the preparation of the work I submit for this open book examination; (ii) given assistance in accessing this paper or in providing specimen, model or ghostwritten work to other candidates submitting for this open-book examination.

#### Queries

To prevent students who take the exam at different times being advantaged or disadvantaged, the examiners have agreed that they will not answer queries relating to the exam paper. You should note any errors or points for clarification that you find on the paper, and after submitting your script should email these to <u>mmsc@maths.ox.ac.uk</u>; these concerns will be taken into account by the examiners.

# Handing-in and Formatting of Scripts

Read this section very carefully.

The mode of completion for your papers will be Handwritten Mode, where you will be expected to provide fully handwritten responses, which you will scan and upload into Inspera. As your mode of completion is Handwritten Mode, you will have an additional 30-minutes of 'technical time' built into your overall exam time for scanning and uploading your exam response material. Please note that technical time is not part of your exam writing time and should only be used to scan and upload your responses.

You must write in blue or black ink to ensure readability. To upload your work, you must submit just one pdf, compiling the answers of all of the questions, in order. The first page of your submission should be the completed examination coversheet. Each question should begin on a new page. You must order your pages by section and question number. It is your responsibility to ensure that all pages or pieces of content are included as expected as part of the PDF before you upload the document. Within Inspera you will have the option to view the PDF you have uploaded and replace it if need be as long as you have not pressed 'submit'.

As this is an electronic submission, you may use a tablet and stylus to write (in blue or black ink) your exam solutions. If you choose to handwrite your solutions, you will have to scan your papers into a pdf format. For those who do not have access to a typical scanner, the department has written guidance on how to 'scan' a document with a smart phone or tablet. Please see the link below for details on how to scan a document using a mobile device: https://www.maths.ox.ac.uk/members/it/faqs/files/phone-scanning

Please note your name or any other identifiable information must not be in the file nor in the title of the file. Any work and uploaded documents should be identified ONLY by your candidate number (which can be found by visiting Student Self-Service).

When you press 'submit' on Inspera, your work has been submitted and you cannot edit it. Thus you should only press 'submit' when the timer expires or you are satisfied that the response is complete. Once you have pressed 'submit', you will be able to see a read-only copy of your submitted response(s).

If you have exited the browser accidentally, you will be able to get back into the test – as long as you have not pressed 'submit'.

#### **Illegible scripts**

Please write legibly. Examiners may require illegible scripts to be transcribed, the cost of which is charged to the candidate. In addition, as this is an electronic submission, it is your responsibility to

ensure that the file you upload is able to be downloaded and opened. We will not accept any late submissions, due to incorrect, corrupt or broken files.

For scanned handwritten files please ensure the following:

- the handwriting is large enough to be easily marked
- the writing is done with a blue or black ink
- the photo 'scan' is taken in good lighting
- no writing is accidentally cropped out of frame during the scan

# Illness

If you are prevented by illness or other cause from attending any part of the examination you should ensure that the Senior Tutor of your college is informed immediately so that they can refer the case to the Proctors. In the case of illness, a medical certificate will be required. In the absence of Proctorial permission to be absent the consequence of non-attendance will be failure of the paper.

# Late Submission or Failure to Submit Coursework

The policy for late penalties has been agreed upon and is listed under the 'Submitting an online exam response late' section of:

https://www.ox.ac.uk/students/academic/exams/problems-completing-your-assessment

You must submit within your exam duration plus the allowed technical time. If you submit your work late you will receive a Fail and receive a mark of 0 (zero). If you experience technical difficulties that mean you are unable to upload your response, you must notify the Student Systems Support Centre (<u>student.systems@admin.ox.ac.uk</u>) straight away. The Student Systems Support Centre will be able to assist you in troubleshooting your difficulties.

You should also immediately contact your academic administrator: <u>mmsc@maths.ox.ac.uk</u> explaining your technical difficulties and providing a copy of your exam solutions (in case you are unable to upload your solutions in time).

If your problem is not resolved or you are unable to upload your exam in time due to technical difficulties, you should also contact your college to submit a mitigating circumstance notice to examiners (MCE).

# MSc in Mathematical Modelling and Scientific Computing

The formal procedures determining the conduct of University examinations are established and enforced by the Proctors.

The Examiners are nominated by the Nominating Committee in the Mathematical Institute and these nominations are submitted for approval by the Vice-Chancellor and the Proctors. Assessors are appointed to assist the examiners and in particular the core course lecturers take on the role of assessors in setting, checking and marking the written exam papers.

It must be stressed that to preserve the independence of the Examiners, candidates are not allowed to make contact directly about matters relating to the content or marking of papers. Any communication must be via the Senior Tutor of your college, who will, if he or she deems the matter of importance, contact the Proctors. The Proctors in turn communicate with the Chair of Examiners.

Examination conventions can be downloaded from the course webpage: http://www.maths.ox.ac.uk/members/students/postgraduate-courses/msc-mmsc These conventions are a guide to the Examiners and candidates but the regulations set out in the Examination Regulations have precedence. The Examiners normally adhere to the published examination conventions, subject to the guidance of the appointed external examiners, and other bodies such as the Mathematics Teaching Committee, the Mathematical, Physical and Life Sciences Division, the University's Education Committee and the Proctors, who may offer advice or make recommendations to examiners.

#### **Standardized Marks and Class Descriptors**

Information relating to standardised marks, class descriptors, and classification can be located in the MMSC Examination Conventions 2021-22 which can be downloaded from: <a href="https://www.maths.ox.ac.uk/members/students/postgraduate-courses/msc-mmsc">https://www.maths.ox.ac.uk/members/students/postgraduate-courses/msc-mmsc</a>