QMUL School of Mathematical Sciences
2024/25 Examination Guidelines

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1. Formats of Final Exams

The overwhelming majority of final exams for the 2024/25 academic year be held in-person on campus. Only a relatively small number of modules will still hold online final exams.

This year, most of the exams will be held over a timetabled 2-hour period (*note: this is in contrast to the previous schedules, which mainly consisted of 3 hours slots, with various formats*). More specifically:

- **Level 4-7 in-person exams:** You will normally have **2 hours** to complete and submit your exam solutions.
- **Level 4-7 online quiz exams**: You will have **2 hours** to complete your exam and submit your exam solutions.
- **Level 4-7 online exams with some handwritten component:** You will have **2 hours** to complete your exam, plus **30 minutes** to scan and submit your solutions.
- **Level 4-6 in-person exams for IFoA accreditations:** You will normally have **3 hours** to complete and submit your exam solutions.
- **Level 4-6 online exams for IFoA accreditations:** You will normally have **3 hours** to complete your exam, plus **30 minutes** to scan and submit your solutions.

All the exams are designed to be completed comfortably by the set deadline. Additional information on the various exam formats are below. For details pertaining to a particular module, please contact the module lecturer.

1.1. In-Person Paper Exams

These are invigilated exams that will be held in a designated room on campus. Please notice that some exams are held in parallel in different rooms, so make sure to check your exam timetable in advance and to enter the correct exam room as indicated. The exam itself will be in paper form, and you will write your solutions either on the exam paper itself or in a separate answer booklet (depending on the module).

- Make sure to arrive at the exam room on time. *If you arrive more than 30 minutes after the start of an exam, then you will not be permitted to enter the exam room.*
- Make sure that the exam script you receive has on the first page the Module Code and name of the exam you are expected to sit (e.g., "MTH4400 Applied Calculus"). If this is not the case, please immediately notify an invigilator.

All the in-person exams will be **closed-book**, and you will not be allowed to bring any notes or other resources into the exam room. Some exam papers will have a formula sheet that constitutes an appendix to the exam paper itself, and is distributed to the students together with the exam paper.

No additional resources beyond the above (e.g., mobile phones, hidden material or writing) will be allowed, and any that are found will constitute an assessment offence.

Whether calculators are permitted for the exam will depend on the specific module:
- If calculators are prohibited, then using one will constitute an assessment offence.
- Otherwise, you will be able to bring a **basic non-programmable calculator** with you to the examination room. (See Appendix B for details on which calculators are allowed.)

You should make sure that any writing that should be marked, including all rough work, are on your exam paper or answer booklet (depending on the module).

- If you run out of space in the main answer booklet, then let the invigilator know, and they will provide a supplementary answer booklet. *Make sure that all booklets that are used are available for collection by an invigilator at the end of the assessment.*
- Do remember to take spare pencils and pens to the exam.

1.2. Online Quiz Exams

These exams are set up as standard quizzes on QMPlus, which you have likely encountered in your coursework. These contain the usual question types supported by QMPlus (e.g. multiple choice):

- Quiz questions are answered within the quiz itself and hence do not require file submissions.
- You can do the quiz questions in any order. In particular, you are free to go back to earlier problems that you have already worked.
- Please consider that some questions might allow **more than one correct answer**. Please always read carefully the instructions provided.

Some QMPlus quiz exams may be **hybrid**, in that they also contain (normally one, sometimes more than one) written components. For these written components, solutions must be submitted either as a handwritten PDF document or as text within the quiz (depending on the module). In the former case, the basic rules of Section 1.1 apply:

- *The submission <u>must</u> be handwritten* (on paper or tablet), not typed.
- *The submission <u>must</u> be as a single PDF file.* (See Appendix A for instructions.)

If your online quiz exam has a handwritten component, you will have to complete your exam within the allocated time slot, and you will have an additional **30 minutes** to scan and submit your handwritten solutions. **Please consider that the additional 30 minutes to scan and submit include the time needed to upload your solutions to QMPlus. Uploads from a domestic Internet connection can be slow, so you are encouraged to start uploading your solutions as early as possible.**

1.3. Online Handwritten Exam

These are online exams for which you will submit handwritten solutions (as a PDF file). These will be contained within a QMPlus quiz, with a single question containing both the exam document and the place where you submit your solution.

The solutions that you submit must be handwritten. In particular:

- The most common method is to submit a scan of your handwriting as a PDF file.
- You are allowed to submit work that was handwritten onto a tablet (such as an iPad).
- On the other hand, *typed solutions are not allowed and may be rejected or penalised* (unless they are exceptionally allowed under exam access arrangements).

Your submission must be as a single PDF file. In particular:

- *Other formats besides PDF will <u>not</u> be accepted.*
- *You will <u>not</u> be able to submit multiple files.*
- See Appendix A for instructions for scanning your handwritten work into a single PDF file.

You will have to complete your exam within the allocated time slot (either 2 hours or 3 hours, depending on the module) and you will have an additional **30 minutes** to scan and submit your handwritten solutions. **Please consider that the additional 30 minutes to scan and submit include the time needed to upload your solutions to QMPlus. Uploads from a domestic Internet connection can be slow, so you are encouraged to start uploading your solutions as early as possible.**

1.4. In-Person IT Lab Exam

These are invigilated exams that will be held in a designated IT lab on campus. The exam itself will be online, given as a QMPlus quiz (as in Section 1.2). However, *you will only be able to access and take the exam on a computer in this IT lab*.
- Make sure to arrive at the exam room on time. *If you arrive more than 30 minutes after the start of an exam, then you will not be permitted to enter the exam room.*

Regarding resources allowed for the exam:
- You will not be able to bring in any outside notes for the exam.
- The extent that the exam is open book will depend on the specific module. Any resources that are allowed will be accessible online through your IT lab computer.
  - In particular, calculators will not be allowed in the IT lab.

Note: Chat rooms, forums, mobile phones, and other communication tools are strictly prohibited.

In short, you should complete the exam in the same manner as you would an online exam, with the only difference begin that you will be in an invigilated IT lab.

2. Submission of Solutions

This section provides some details on submitting solutions to your final exams.

2.1. Exam Time Limit

Each exam will be held over a **2-hour** or **3-hour** period:

- You will need to complete the exam and submit your solutions within this time window.
- Online exams with a handwritten component will allow additional **30 minutes** to scan and submit the solution.

All the exams are set so they can be completed comfortably within the provided time period, and their structure and format is in line with past exams for the same module.

- *Any students having exam access arrangements will receive additional time in their exam, as required by their needs, and will sit the exam in a separate room.*

In-person exams: Time limits for exams will be enforced by invigilators. *Once the end of the exam time is announced, you must stop writing immediately.*

Online exams: Online exams in the format of QMPlus quiz or held on an external system will close at the end of the **2 hour** or **3 hour** period, while online exams with a handwritten component will close at the end of **2 hours 30 minutes** or **3 hours 30 minutes**, where the last 30 minutes are intended to be used to scan and submit your solutions. *After the deadline has expired, you will not be able to access the exam.*

- The exam period includes the time needed to upload your solutions. Thus, please ensure that *any handwritten parts are fully uploaded and submitted <u>before</u> the deadline*.
  - As before, all your work is automatically submitted at the deadline. However, you must still fully upload any files within the time limit for it to be included in your submission.
  - *No submissions will be accepted once the exam closes.* To be safe, *please give yourself plenty of time to upload your submissions*, so you finish within the allotted time limit.
- You will not receive extra time if you begin your exam late, so make sure to start on time.

Examiners will not be answering queries about the exam at any point in the exam period.
- If you have a query about the paper (e.g. you think there is a mistake or a typo), please signal this to the invigilator, who will decide whether forwarding the query to the examiner is indeed necessary. In any case, you should make a note in you solution of any suspected inaccuracy or typo in the exam paper, and answer as best you can. The examiner will then take this into account when marking.

2.2 [Online Exams Only] Uploading Your Solutions

This part applies only to online exams.

Each handwritten part must be uploaded as a single PDF file.
- See Sections 1.2 and 1.3 for additional details.
- Handwritten exams will always only have one such part. In addition, most hybrid quizzes will only have one handwritten part as well.

To upload a PDF file for a handwritten part, you can do one of the following:
- Drag-and-drop the file into the upload window.
- Click to choose the file using the file picker.

You should then see your file in the upload window. By right-clicking on the file, you can download it again to check that it is the correct one, and you can delete and replace it if necessary.

When you have finished all the questions, you can submit by clicking "*Finish attempt…*", followed by "*Submit all and finish*". (Note: Even if you do not explicitly do these steps, your attempt will still be automatically submitted at the deadline.)
- *You will only have <u>one</u> opportunity to submit your assessment*.
- You will not have the chance to alter your submission afterwards, so make sure everything is in order before you click to submit. Make sure you give yourself plenty of time to organise and submit your solutions.

Immediately after submitting, you should be able to see your attempt for a few minutes:
- In particular, you can see the responses you gave to all the exam questions.
- For handwritten parts, you can also see any PDF files that you uploaded. Here, you should *check again that you have uploaded the correct file(s)*.

It is your responsibility to make sure that the uploaded file is the correct one. If you notice a *technical* error at this point (e.g., corrupted file uploaded), then you should immediately send the correct version to <u>maths-qmplus@qmul.ac.uk</u> –we can take this into account, provided your e-mail (with the PDF file) is received *before the deadline* (see Section 2.3).
- *There will be no additional grace period for e-mail submissions, so please make sure your e-mail submission is received prior to the deadline!*

The combination of timed exams and single PDF submissions, along with the high-stakes nature of final exams, gives cause for some understandable concerns. Please note the following:
- All the exams are set so they can be completed comfortably within the provided time period, and their structure and format is in line with past exams for the same module. The extra 30 minutes at the end of the exam period in online exams with handwritten components are meant to be used **exclusively for scanning and submitting your solution.**
- There are relatively straightforward methods for scanning your handwritten solutions into a single PDF file. You are encouraged to install and test any scanning software you plan to use **well before the exam.** See Appendix A for some additional details.
- Issues arising from *unexpected* tech-related incidents (e.g. QMPlus errors) *may* be taken into consideration **exclusively if the problem is known to be due to QMPlus, and has been verified and confirmed by the QMUL IT Services team. Any other technical issue (e.g., interruption of your Internet connection, laptop crashing, etc.) are NOT considered excusable technical issues, in accordance with Academic Regulations.** See Sections 2.3 and 2.4 below for additional details.

2.3. [Online Exams Only] Submission Deadlines and Backup

This part applies only to online exams with handwritten submissions or handwritten components.

Students sitting an online exams must submit their solutions through QMPlus, or through the online portal where the exam is held. Once a solution is submitted to QMPlus, it is considered **final and authoritative**.

Submissions that are uploaded later than the set deadlines detailed below, or that are missing altogether when the deadline expires, will score a zero. Notice that generic IT issues do not constitute sufficient ground for EC claims (see also Section 2.4**).**

The Faculty of Science and Engineering has recently put in place a new policy regarding late submission of solutions for **online exams.** According to this policy, submissions for online exams are acceptable up to **10 minutes after the total exam period has expired, but those submissions will be penalised by withholding 10% of the marks available in that exam.** For instance, if an online exam which is marked in a scale 0-100 has a duration of 2 hours + 30 minutes (for scan and submit), a student can still submit their answers up to 2 hours and 40 minutes from the start of the exam, but their submission will undergo an automatic deduction of 10 marks (10% of the total marks) if they submit after 2 hours and 30 minutes and up to 2 hours and 40 minutes, included. In this example, any submission received within the **2 hours + 30 minutes** will not undergo any such deduction. Any submission received **after 2 hours and 40 minutes will not be considered and will score zero.**

As an additional precautionary measure, in the rare and quite improbable case of a massive failure of the QMPlus infrastructure (which has never happened during exams in the last five years), the students have the **voluntary option of sending via email a backup of their submissions for online exams, including the file to be submitted.** Those email backups **must be sent from the student's official QMUL account, must contain exactly the same PDF file which has been submitted through QMPlus, must indicate the Student ID and Module code and name, and must be addressed to** maths-qmplus@qmul.ac.uk If you decide to send in a backup email of your submission, you must do that **after** you have successfully completed your submission through QMPLUS, and your backup email must be received by the School within the set exam deadline. Such backup emails **do not constitute a submission and are not to be considered as a replacement of a QMPlus submission.** If the QMUL IT Services confirm that QMPlus was working correctly at the time when submissions were expected, all the backup emails will be discarded immediately after the exam deadline has expired, without any further consideration. If a student fails to submit through QMPlus for whatever reason, and that reason is not due to a QMPlus failure as ascertained by the QMUL IT Services, **their exam will score a zero**, irrespective of whether they have sent a backup submission via email or not.

2.4. Extenuating Circumstances (ECs)

Some general points about extenuating circumstances (ECs) are as follows:
- The process of applying for ECs is the same as before, for coursework and midterm tests.
- Make sure that your claims are submitted by the EC deadline.
- If an EC is granted, then you will have the opportunity to take the exam as a first sit during the late summer resit period in August.
- The Education Services Team have sent information about ECs regularly, but if you have additional questions, then you should contact maths@qmul.ac.uk.
- **Please consider that travel delays are not normally considered sufficient ground for EC claims. Students are responsible of making appropriate travel arrangements on the day of the exam, and of reaching the exam room in time.**

- **In general, personal IT-related issues are not acceptable as a ground for EC claims, as per Academic Regulations.**

Online exams only: IT-related issues that are considered unexpected and that are due to the QMUL IT infrastructure will be taken into account collectively for an entire cohort sitting an exam. However, having to defer an exam because of tech-related issues is still unpleasant, and the School and the College will put in place all the required measures to ensure that Online exams will not be disrupted by IT issues.

In general, IT-related issues due to QMPlus which can interfere with the upload of your solution might be taken into account only in the case that such issues have been verified and confirmed by the QMUL IT Services team. Any other kind of technical issues (e.g., interruption of your Internet connection, laptop crashing, loss of files, etc.) are NOT considered excusable technical issues, in accordance to QMUL Academic Regulations. You are responsible for making sure that your Internet connection works properly for the duration of the exam, that your laptop has a reliable source of power for the entire duration of the exam, that you saved the correct version of your files, and so forth. EC Claims based on "IT Issues" are not excusable and will in general be rejected, in accordance with current Academic Regulations.

3. Academic Offences

In the interests of academic standards and fairness to all students, it is important that your work is entirely your own. The following sections provide further detail on what is allowed for exams, and what constitutes academic misconduct.

3.1. In-Person Exams

Here, the regulations are simple–*if you are found by an invigilator to be using any resource beyond what is allowed in the exam room, then this will be considered an academic offence*.

For **paper exams** (see also Section 1.1):
- All exams will be closed book, and you will not be allowed to bring any notes.
- Some exams will also require you to bring a **basic and non-programmable** calculator (see Appendix B for details). Ask your module lecturer for further information.
- *Keep in mind that hidden material and communication devices (e.g. mobile phones) are not allowed. Any use of these will be considered an academic offence, and dealt with appropriately.*

For **IT lab exams** (see also Section 1.4):
- What resources are allowed will differ depending on module, but any such resources will be accessed online through the IT lab computer.
- In particular, *you will not be allowed to bring any paper notes or calculators to the exam*.
- *Use of any communications tools* (e.g. mobile phones, chat rooms, forums) *in the IT lab will be considered an academic offence*.

3.2. Online Exams

All online exams are *open-book*, which means that:
- Lecture notes and other digital and printed resources from the module are allowed, including past courseworks and worked solutions.
- Textbooks are allowed.
- Internet sources are allowed, *as long as such websites do not refer to the exam questions themselves or their solutions*.

In addition, you may use calculators (of any type) or computer programs, such as Excel.
- For handwritten questions, you must show full working to demonstrate that you understand the solution. This should be part of your PDF submission.

On the other hand, it is an academic offence to ask for, to accept, or to offer help. *You should not communicate with anyone else about the exam or the module contents for the entirety of the period in which the exam is available*. This means that:
- You are not allowed to ask anyone else to answer questions for you or even to give you a hint; you must refuse such help if it is offered.
- You are not allowed to discuss the exam or any related topics with other students (either in person or via online chat groups such as *WhatsApp* and *Discord*).
- You are not allowed to share or post exam questions on online forums (such as *chegg.com* or *bartleby.com*), or to request solutions via paid services.
- You are not allowed to copy or otherwise make use of any solutions to exam questions that are found on any online forum or via paid services.

The above should not be considered an exhaustive list of offences. If in doubt, please ask for further clarification. If still in doubt, please play safe and refrain altogether from indulging in any such behaviour.

3.3 Penalties

For details on academic misconduct and resulting penalties, see:
https://www.qmul.ac.uk/governance-and-legal-services/media/arcs/Academic-Misconduct-Penalty-Guidance-2023-24.pdf

A. [Online Exams Only] Instructions for Single PDF Submissions

This section applies only to online exams with handwritten submissions.

The following subsections describe a number of methods for scanning your handwritten work into a single PDF file. While these steps are fairly straightforward, *it is important that you test the method you plan to use prior to your exams*!

(There are several other methods beyond what is described below. Of course, you are free to use any method that works for you.)

A.1. Office Lens

Microsoft Office Lens is an app, available for *iOS* (via the *Apple Store*) and *Android* (via the *Google Play Store*) systems, that can be used to photograph and scan documents into a single PDF file.

For more detailed instructions, you can also consult the following links:

- [Article] "Scanning to PDF" (Somerville College, University of Oxford)
  - https://it.some.ox.ac.uk/scanning-to-pdf/
- [Article] "How to scan printed documents with the free Microsoft Office Lens app" (TechRepublic)
  - https://www.techrepublic.com/article/how-to-scan-printed-documents-with-the-free-microsoft-office-lens-app/
- [Video] "Producing a multiple page PDF in Office Lens" (Mr Smith's Physics online)
  - https://www.youtube.com/watch?v=H7ET9k01-Zc
- [Video] "Scanning tutorial: scan a PDF from your phone with Office Lens" (RGB Mathematics)
  - https://www.youtube.com/watch?v=Z7ztz3y8rMQ

(Keep in mind that different versions of the *Microsoft Office Lens* app will work slightly differently, so the process for your device may be a bit different from what you find in the above.)

A.2. iOS Notes

The basic *Notes* app that can be found on mobile devices running *iOS* (e.g. *iPhone*, *iPad*) can also be used to scan documents to a PDF file.

For more detailed instructions, you can also consult the following links:

- [Article] "How to use the document scanner in the Notes app on iPhone and iPad" (iMore)
  - https://www.imore.com/how-use-document-scanner-iphone-and-ipad
- [Article] "How to scan documents and make PDFs using Notes on your iPhone or iPad" (Macworld)
  - https://www.macworld.com/article/3390539/how-to-scan-documents-and-make-pdfs-using-notes-on-your-iphone-or-ipad.html
- [Video] "How to scan documents and make PDFs with iPhone or iPad" (TechBoomers)
  - https://www.youtube.com/watch?v=yEQRKnu4yLo
- [Video] "How to Scan Documents as PDF in Notes App - iPAD" (David Williams)
  - https://www.youtube.com/watch?v=UKI1a8GIOcA

(Keep in mind that different versions of the *Notes* app will work slightly differently, so the process for your device may be a bit different from what you find in the above.)

A.3. Tablet handwriting software

If you are using a tablet to produce handwritten solutions, then this should be fairly straightforward. All the standard note-taking apps (e.g. *Microsoft OneNote*, *Notability*, *GoodNotes, iOS Notes*) will allow you to export your handwritten document directly into a PDF file.

For details, see instructions for your favourite note-taking app.

A.4. Using laptops or desktop computers

Of course, if you have access to a digital scanner, then you can use that to scan your documents.

You could also photograph documents using your webcam, though this can be a bit awkward.
- For example, the web app "Create PDFs with a camera" from *PDF24* allows you to do this online from your web browser; see https://tools.pdf24.org/en/scan-pdf.

B. [In-Person Exams Only] Guidelines for Calculators

B.1. Overview

Most exams do not allow you to bring your own calculator, as a calculator is not at all needed to complete the exam. If an exam allows calculators, those are normally referred to in the exam papers as "**non-programmable calculators**". This is a quite generic term to identify all kinds of calculators that can do what any scientific calculator can. In particular, **basic, non-programmable calculators** can perform arithmetic and trigonometric operations, exponentiation, logarithms, and not much more.

Conversely, **advanced, programmable calculators** can normally do a few or many more things, and they have at least one or more of the following features:

1. They are capable of storing text or alphanumeric data input by a user.
2. They are capable of storing, manipulating, or graphing functions entered in symbolic form.
3. They are capable of performing operations such as differentiation, definite integration, algebraic expressions, binomial expansion, symbolic differentiation and the solution to system of equations.
4. They are capable of external communication or Internet connectivity.
5. They display a matrix and vector function key, and/or can perform matrix and/or vector operations.
6. They allow use of the full alphabet from A-Z.
7. They are capable of storing programs or procedures defined by the user.
8. They tend to be bulky and heavy in comparison to basic non-programmable calculators.

If a calculator is capable of doing even one of the 8 things above, then **it is not considered a basic, non-programmable calculator, and it is thus prohibited during exams**. If you do not know whether your calculator classifies as programmable or non-programmable, then check its user manual and make sure that **none of the above functions is made available by the calculator you wish to use during an exam**. If you are still in doubt, then you can ask the module lecturer for more detailed advice. *In any case, you are responsible for ensuring that the calculator that you bring into the exam room is appropriate and allowed for that exam. Any contravention to this indication will be considered an examination offence, and will be dealt with appropriately.*

The examination invigilator will check your calculator before and during the examination. If your calculator is programmable, according to the definition provided above, then it will be confiscated from you and you will be reported by the invigilator for unauthorised use of materials. This is an academic offence.

If you are still unsure about your calculator on the day of the exam (something you are *strongly encouraged to avoid*), then ask the invigilator *before* the start of the examination. It may be possible to provide you with an alternative calculator if an element of doubt exists.

In the past we used to provide a non-exhaustive list of **allowed non-programmable calculators.** Unfortunately, this is not manageable any more, for several reasons. First, it is impossible to track down all the makes and models of basic non-programmable calculators. Second, many calculator brands use tiny variations of the same model name to identify several different calculators having a really wide range of functions. Just to provide one relevant example: there exist more than two dozens CASIO calculators models called "Fx-991-something",   with less than half of them being

genuine **basic non-programmable calculators**, and the remaining ones falling in the class of **advanced, programmable calculators** for one or more of the reasons detailed above. Moreover, model names keep changing every year, and the simple "renaming" of a basic non-programmable calculator model quite often comes with some added extra features which make the new version advanced and programmable, under the definition provided above. And this is just for one of the many makes of calculators available in the market. It is truly impossible for us to provide a comprehensive and final list of allowed non-programmable calculators, hence we refrain from making such attempt, at all.

The only meaningful thing we can say is: **your calculator is non-programmable and allowed in an exam if it does not sport <u>any</u> of the 8 features detailed above. It is your responsibility to check that the calculator you intend to use in an exam is basic and non-programmable. If your calculator can do even one of the 8 things detailed above, it is considered an advanced programmable calculator, and is thus prohibited to bring it into an exam room.**