Examination Conventions for the
MSc in Applied Digital Health

Please note that this is Version 1 of these Conventions. An updated version of these Conventions, containing further details about the Hilary Term module assessments, will be published in due course. All students will be alerted when the updated version is published.

1. Introduction

The following examination conventions apply to the MSc in Applied Digital Health for the academic year 2022-23. The Conventions have been approved by the Medical Sciences Division Audit Sub-Committee on behalf of the Medical Sciences Board in October 2022.

Examination conventions are the formal record of the specific assessment standards for the course or courses to which they apply. They set out how examined work will be marked and how the resulting marks will be used to arrive at a final result and classification of an award.

2. Rubrics for individual papers

The programme consists of eight compulsory modules (in the Michaelmas and Hilary terms) and a dissertation (in the Trinity term and part of the summer break). Candidates must satisfy the Board of Examiners (hereafter "examiners") in the assessment unit associated with each component of the course.

2.1 Module assessment

Candidates must complete the assessment unit associated with each module (the 'module assessment unit'). It should be noted that, for module assessment units, students will **not** be given a selection of questions from which to choose.

The structure of assessments for Michaelmas Term modules is outlined in the table below. The structure of assessments for Hillary Term modules will be provided in an *updated version of these Conventions which will be published in due course.*

Module	Summative Assessment
Module 1: Foundations of Digital Health	An essay to be written for a policy audience on a digital health innovation (min. 1500, max. 2000 words)
Module 2: Clinical Informatics for Trials and Health Surveillance	A set of exercises (with no set word count). These exercises may, for example, include programming tasks requiring a numerical or graphical answer; the interpretation of R output; and/or closed format questions.
Module 3: Harnessing Big Data to Improve Care	A set of questions exploring the design of a Clinical Prediction Rule (min. 2000, max. 3000 words)
Module 4: Remote Monitoring and Digital Diagnostics	Includes programming exercises as well as open and closed format questions, concerning digital diagnostic and/or remote monitoring tools. There is no specified word count for the programming exercises or the closed format questions. The cumulative word count for the open format questions is min. 2100, max. 2900 words, although candidates will be given specific word count requirements for each such question.

Assessment release and submission dates will be published in the course handbook at the start of the course. All assignments must be submitted via Inspera. So that submissions remain anonymous, where possible given the nature of the assessment, it is the responsibility of students not to include their name but instead use their candidate number

(which is not the same as their university card number). Students can find their candidate number via .

All the work must be the candidate's own. Candidates are permitted a maximum of 10 minutes consultation with the module tutor for points of clarification, for each module assessment. Candidates must not seek advice from any other teaching staff or fellow students. Each submission must be accompanied by a completed Declaration of Authorship form found on the course Canvas site. Depending on the type of assessment, some may require the submission of a word count (overall or by section).

Students' work should be formatted using 12-point font size for the text. Assessments should be submitted in English, UK not US spelling. A consistent referencing system must be used throughout. For document clarity, we *recommend* the Harvard or APA referencing styles however other popular styles (e.g. Vancouver, BMJ, Chicago) are also acceptable if used consistently.

Late submissions will be penalized as outlined in Section 3.5. Exceeding a specified word limit will result in penalties as detailed in Section 3.6 of this document.

2.2 Dissertation

Candidates are required to undertake a dissertation project. The subject of the dissertation must have been granted final approval by the Academic Directors by the end of the Hilary term.

The dissertation project requires the submission of a manuscript. This will usually be in the form of an academic journal paper, and should consist of:
- A title that describes the content accurately and concisely
- Lay abstract
- Structured scientific abstract/executive summary
- Introduction including background/context & summary of relevant previous work
- Methods
- Results
- Structured discussion including a summary of findings or arguments, discussion of strengths and weaknesses of the work, implications for policy and practice and recommendations for future research
- Conclusions
- Reflections on your experience of the dissertation project
- Conflict of interests
- References

Alternatively, students may identify a specific target journal and conform to the house style of such provided the manuscript contains the equivalent content. Furthermore, the dissertation may take the form of a report or brief, suitable for public publication or circulation to professional networks, if this best suits the subject matter. However, given that such documents vary greatly in terms of structure, should a candidate wish to use such a format for their manuscript this must be approved by the Academic Directors by the end of Hilary Term.

The dissertation has a maximum word limit of 8,000 words and should be at least 6,000 words long. The word count does not include tables (or their headers), figures (or their headers), acknowledgements, references or bibliography. However, it does include any footnotes. No appendices or supplementary files will be allowed.

Candidates are permitted to discuss the dissertation with their dissertation supervisor and academic supervisor, who may both read and comment on drafts of the dissertation. Although students may be part of a research group undertaking a larger work package, the work for the dissertation project **must** led by the student and be their own work such that they would meet the usual criteria for 'first and lead author'. Dissertation supervisors will be asked to

confirm the level and originality of the student's contributions to joint work and the nature of collaborative contributions of other students, staff, and/or external advisors.

The dissertation should be typed in double-spacing using 12-point font size for the text with a 2.5cm margin on the left hand side of each page and should be submitted in English, UK not US spelling, unless otherwise stated by a specific target journal. Candidates should use a consistent referencing style: for document clarity we *recommend* the Harvard or APA referencing styles, however other popular styles (e.g. Vancouver, BMJ, Chicago) are also acceptable. The pages should be numbered.

The dissertation should be submitted with two additional pages at the front, neither of which add to the final word count. The first page should be the Title Page and should carry the full dissertation title, the word count, the award for which the dissertation is submitted, the student's candidate number and the date. The second page should be the Acknowledgement Page and contain details of the candidate's contribution to the project. It should detail exactly what aspects of the work the candidate undertook and also what help they received and from whom (this will then be reviewed by the dissertation supervisor and academic advisor). The statement should be no more than 500 words (not included towards the word count). If appropriate, it should also contain a brief statement about research ethics approval.

The deadline for dissertation submission will be published in the course handbook at the beginning of the academic year. Submissions will be made via Inspera. Candidates should also submit an electronic version (Word format) of the dissertation to the Programme Coordinator, along with a Declaration of Authorship form found on the course Canvas site.

3. Marking conventions

Agreed marks for individual assessment items and units are converted into a standardised expression of agreed final marks i.e. on a 100-point scale.

3.1 University scale for standardised expression of agreed assessment marks

Agreed final marks for individual assessment items and units will be expressed using the following scale:

70-100	Distinction
65-69	Merit
50-64	Pass
0-49	Fail

3.2 Qualitative marking criteria for different types of assessment

The following marking scheme and criteria are used as a **general guide** for all module assessments (as appropriate) and the dissertation. For ease we refer to an "assessment question", even though an assessment may contain multiple questions or be the dissertation question.

Please note: this is **a *guide* for markers** (examiners and assessors), to help them make an overall assessment of the module assessment or dissertation. As the MSc in Applied Digital Health includes a wide range of assessment types, ***not all qualitative descriptors will be appropriate for all assessments***. In order to secure a mark between 65 to 69, for example, the candidate's work does not have to be judged in the 65 to 69 category in all four criteria. It may be that in one or two aspects, the work is considered to merit a score of 50 to 64 or even above 70. Examiners and assessors will mark each assessment according to the model answer and key points provided and will then consider whether, taken

as a whole, the mark awarded to the candidate's submission is generally consistent with the qualitative descriptors in the mark scheme below.

Mark	Competence	Critical thought	Context, contribution* & creativity	Clarity
70-100	Work shows an *excellent* command of the topic. The answer to the research question is comprehensive, in-depth and highly convincing. Ideas are very well developed and all arguments comprehensively backed up with evidence. Terms and concepts are correctly and clearly described or defined. Chosen methodology is correctly and elegantly outlined/executed.	There is a nuanced discussion of the issues and debates related to the assessment question. Work includes a confident critique of evidence used or assumptions made. Limitations of the work are considered carefully.	Demonstrates good understanding of the context surrounding the assessment question, drawing on some sources and ideas from outside the curriculum. Evidence of some wider reading (beyond the taught content and set self-study reading). Methodological choices are strong, using the course content as a frame of reference. Details are discussed and appropriate. Choices are clearly justified and potential alternatives discussed. Derives specific and appropriate implications for practice and future research.	A well written piece. It is structured in a logical and coherent manner. The writing style is fluent, without grammar or spelling errors.
65-69	Work shows a *good* command of the topic. The answer to the research question is convincing, although it may lack depth. Ideas are reasonable and all arguments are backed up with some evidence. Terms and concepts are correctly described or defined. Chosen methodology is correctly outlined/executed.	There is some discussion of the key debates related directly to the assessment question. Work includes a critique of most of the evidence used or assumptions made. Some of the key limitations of the work are identified.	Demonstrates a general understanding of the context surrounding the assessment question, although the answer may lack depth in parts. Methodological choices are suitable. The key details relating to the chosen methodology are discussed and appropriate. Alternatives are not discussed or only touched on briefly. Touches on the key aspects of implications for practice.	A well written piece. It is structured in a logical and coherent manner. The writing style is good, with limited grammar or spelling errors.
50-64	Work shows *a basic to moderate* command of the topic and knowledge of the core material. The answer to the research question may contain some omissions, and may lack depth, but is convincing overall.	There is discussion of the key issues related directly to the assessment question, although there may be gaps. Work includes a rudimentary critique of most of the evidence used or assumptions made.	Demonstrates a some understanding of the context surrounding the assessment question, although the answer lacks depth and focus. Methodological choices are acceptable, even if arguably better alternatives exist. Some of the key details relating to the chosen methodology are discussed and on the whole are appropriate. Alternatives are not discussed.	A fair piece of work, with an adequate structure, although the logic of the argument may at times be confusing. There may be some notable grammar or spelling errors.

	Arguments are reasonable but there is weakness in the supporting evidence. Terms and concepts are described or defined in an acceptable way, although may be arduous. Mostly correct outline/execution of chosen methodology.	Limitations of the work are not explicitly identified or only briefly touched on.	Touches on some implications for practice, although may miss key points.	
0-49	Work shows an *incomplete* command of the topic, confusing or omitting core concepts. The research question has not been answered. Ideas are often undeveloped. Arguments may be misguided and are rarely backed up with (suitable) evidence. Terms and concepts are not described or defined, or are described or defined incorrectly. Incorrect outline/execution of methodology	Key discussion points relating to the topic are either misunderstood or not addressed at all. Fails to consider counterarguments or conflicting evidence at any point. Limitations of the work are not identified.	Demonstrates an inadequate understanding of the context surrounding the assessment question. Methodological choices are not appropriate or given in enough detail. Does not touch on practice implications, or ideas on the subject are rudimentary and poorly argued.	A badly written piece. The structure is often confusing. There are numerous grammar or spelling errors, and the work is not appropriately referenced.

*Contribution: it is not likely that the module assignments will make a contribution to knowledge in the field. This is more applicable to dissertations.

3.3 Verification and reconciliation of marks

For assessments without a model solution, two markers independently mark each assessment (i.e. both are unaware of each other's marks/comments at the time of marking). Where the two marks fall within 5 marks of each other (on the 100 point scale) and do not cross a grade boundary, the mean of the two marks is taken. Where marks are more than 5 marks apart (on the 100 point scale), or if the two independent marks cross a border (e.g. Distinction/Merit, Merit/Pass or Pass/Fail), the markers will discuss and agree a final mark. If the two markers cannot agree, the Chair of Examiners will arbitrate, and if necessary, make a final decision.

Reconciliation sheets will be used to maintain a written record of how marks are agreed.

Marks are recorded to nearest whole numbers.

3.4 Scaling

The examiners may choose to scale marks where in their academic judgement:

    a.   An assignment was more difficult or easy than in previous years, and/or

b. An assignment has generated a spread of marks which are not a fair reflection of student performance on the University's standard scale for the expression of agreed final marks, i.e. the marks do not reflect the qualitative marks descriptors.

Such scaling is used to ensure that candidates' marks are not advantaged or disadvantaged by any of these situations. In each case, examiners will establish if they have sufficient evidence for scaling. Scaling will only be considered and undertaken after moderation of a paper has been completed, and a complete run of marks for all assignments is available.

If it is decided that it is appropriate to use scaling, the examiners will review a sample of submissions either side of the classification borderlines to ensure that the outcome of scaling is consistent with academic views of what constitutes an appropriate performance within each class.

Detailed information about why scaling was necessary and how it was applied will be included in the examiners' report and the algorithms used will be published for the information of all examiners and students.

3.5 Penalties for late or non-submission of submitted coursework

The scale of penalties agreed by the Medical Sciences Division in relation to late submission of assessed items is set out below. Details of the circumstances in which such penalties might apply can be found in the *Examination Regulations* (Regulations for the Conduct of University Examinations, Part 14.)

If a candidate submits after the prescribed date and time of submission, and without having such a submission accepted by the Proctors, the examiners shall apply the following academic penalties. Such penalties will be applied regardless of whether or not the piece of work is submitted over a weekend, public holiday, or fixed closure day etc. after the deadline:

≤ 24 hours late: 5 points (marks) will be deducted from the candidate's *final agreed mark* for the assessment, on the University's 100-point marking scale;

> 24 hours and ≤ 48 hours late: 10 points (marks) will be deducted from the candidate's *final agreed mark* for the assessment, on the University's 100-point marking scale;

> 48 hours and ≤ 72 hours late: 20 points (marks) will be deducted from the candidate's *final agreed mark* for the assessment, on the University's 100-point marking scale;

> 72 hours late but submitted within 14 calendar days of the deadline: the assessment will be awarded a mark of zero and this will be treated as a fail as a result of poor academic performance (an 'academic fail'), with the re-sit arrangements as set out in Section 5.

> 14 calendar days after the deadline: the submission will automatically be deemed a non-submission (a 'technical fail') and will result in failure of the assessment unit, with the re-sit arrangements as set out in Section 5.

Candidates are advised to contact their course director for advice as soon as possible, in particular if there may be a valid reason for late submission[1].

When late submission results in failure of an assessment (following either the application of an academic penalty or a deemed non-submission) re-sit arrangements as set out in Section 5 will apply. Candidates should note that the overall final mark that a student can achieve in this case is capped at a Pass.

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[1] For more information please see: https://www.ox.ac.uk/students/academic/exams/problems-completing-your-assessment

The Module 8 assessment unit consists of two assessment items: a written submission and a recorded presentation. Candidates must submit both assessment items; if a candidate does not submit both Module 8 assessment items then the whole Module 8 assessment unit will be deemed a non-submission.

3.6 Penalties for over-length coursework

Where a candidate submits a dissertation or assessment which exceeds the prescribed word limit, the examiners will impose the following tariff of marks deductions

Percentage by which the maximum word count is exceeded	Cumulative mark penalty (up to a maximum of 20)
≤ 5% over word limit	5 marks will be deducted from the candidate's final agreed mark for the assessment, on the University's 100-point marking scale.
>5% and ≤ 10% over word limit	10 marks will be deducted from the candidate's final agreed mark for the assessment, on the University's 100-point marking scale.
>10% and ≤ 20% over word limit	20 marks will be deducted from the candidate's final agreed mark for the assessment, on the University's 100-point marking scale.
> 20% over word limit	The candidate will be awarded **zero marks** (a fail) for the assessment concerned.

Where a penalty for over-length work results in failure of an assessment item, this will be treated as an academic fail of the assessment item. The policy on resits is set out in Section 5. Candidates should note that the overall final mark that a student can achieve in this case is capped at a Pass.

The dissertation has a minimum word count of 6,000. Some module assessments will, where appropriate, have a minimum word count. Assignments which fall short of the minimum will not be directly penalised, although they are unlikely to have covered the subject in sufficient detail and marks may suffer as a consequence. Bibliographies, tables (and their headers), figures (and their headers), appendices and references are not included in the word count. Footnotes and endnotes are included in the word count.   Candidates are reminded that over-reliance on quoted material, even where properly referenced, may restrict the opportunity to present their own material, and this may, therefore, affect marks awarded.

3.7 Penalties for poor academic practice

All students are expected to act as responsible members of the University's community. This includes ensuring that all submitted assessments are entirely their own work, except where otherwise indicated. It is forbidden to copy from the work of any other candidate, or consult or collude with any other candidate. Students are not permitted to discuss the module assignments with other students, nor post on social media or other fora about the assignment content.

Students are not permitted to submit work which has been submitted, either partially or in full, either for their current qualification, or for another qualification of this University, or for a qualification at any other institution.

Students may refer to their own course notes, as well as offline and online resources (e.g. textbooks or online journals), for the module assignments and dissertation, assuming they adhere to good academic practice.

The examiners shall deal wholly with cases of poor academic practice where the material under review is small and does not exceed 10% of the whole.

Assessors should mark work on its academic merit, with the examiners responsible for deducting marks for derivative or poor referencing.

Determined by the extent of poor academic practice, the examiners shall deduct between 1% and 10% of the marks available for: cases of poor referencing where material is widely available factual information or a technical description that could not be paraphrased easily; where passage(s) draw on a variety of sources, either verbatim or derivative, in patchwork fashion (and examiners consider that this represents poor academic practice rather than an attempt to deceive); where some attempt has been made to provide references, however incomplete (e.g. footnotes but no quotation marks, references at the end of a paragraph, inclusion in bibliography); or where passage(s) are 'grey literature' i.e. a web source with no clear owner.

If a student has previously had marks deducted for poor academic practice or has been referred to the Proctors for suspected plagiarism the case must always be referred to the Proctors.

In addition, any more serious cases of poor academic practice than described above should also always be referred to the Proctors.

Student specific information about plagiarism is available on the Oxford Student Website

4. Final classification conventions

Final marks, as for the individual assessment items and units, are represented as whole numbers on the University's 100-point scale.

4.1 Final outcome rules

Marks for individual assessment units will be weighted according to how they contribute to the final degree.
The relative weights of the assessment units are as follows:

- **Each of the module assessment units carries equal weight (8.75%) and the total value of the module assessment units is 70% of the final award.**
- **The dissertation will account for 30% of the final award.**

Overall final marks will be expressed using the following scale. It should be noted that where a candidate has failed to pass an assessment unit as a result of either poor academic performance or non-submission of an assessment item/unit, the overall final mark for the degree as a whole will be capped at a pass (for further information see Section 5 on resits below).

Achieve an overall mark of 70-100% and pass all summative assessment units at the first attempt	**Distinction**
Achieve an overall mark of 65-69% and pass all summative assessment units at the first attempt	**Merit**

Achieve an overall mark of 50-64% and pass all summative assessment units (first or second attempt) **OR** Achieve an overall mark of 65%+ but only pass one or more of the summative assessment units at the second attempt	**Pass**
Achieve an overall mark of 0-49% **AND/OR** Do not pass one or more of summative assessment units (even after a second attempt)	**Fail**

Borderline Marks

A candidate whose overall degree mark lies within ≤2 marks of a particular boundary (distinction/merit, merit/pass or pass/fail) will be considered as 'borderline' and considered for classification in the higher category. In such cases, the candidate's overall performance will be discussed in depth at the final examiners' meeting. The examiners will take the following factors into account in deciding the candidate's agreed final mark for the degree: (i) the overall mean mark, (ii) the overall median mark, (iii) the distribution of assessment marks, (iv) special circumstances notified by the Proctors.

PGDip candidates

For any candidate graduating with a PGDip rather than an MSc, for reasons as set out in the special Examination Regulations for the course, the assessment units relating to the eight modules will be equally weighted at 12.5% of the overall degree. The criteria for the award of Distinction, Merit, Pass and Fail will be as set out in the table above.

5. Resits

Candidates who fail to satisfy the examiners in any one of the module assessment units, either as a result of poor academic performance or late/non-submission of an assessment item or unit, may retake the failed assessment unit on one further occasion. Normally this will be within the same academic year before the final Exam Board meeting. In exceptional circumstances it may be at the time these assessments are submitted during the following academic year. Re-sits of Module 1-8 assessment units will be based on a new coursework title.

Candidates who fail to satisfy the examiners in the dissertation will be given the opportunity to work on improving the write-up of their project and may resubmit their dissertation once (and only once) more, normally in the same academic year, prior to the final Exam Board meeting. Where extensions or other unforeseen circumstances mean that resubmission in the same academic year is not possible, resubmission should take place in the following academic year, by a date agreed with the Exam Board.

Where a candidate has failed an assessment unit as a result of poor academic performance the mark for the resit of the assessment unit will be capped at a pass (50%). Where a candidate has failed an assessment unit as a result of non-submission of an assessment item or unit (a 'technical fail') the mark for the resit of the assessment unit will also be capped at a pass (50%).

Where a candidate fails any assessment unit at the first attempt, their overall degree outcome will be capped at a Pass (i.e. they will not be eligible for a Merit or Distinction in their degree overall).

The Module 8 assessment unit consists of two assessment items: a written submission and a recorded presentation. The mark for the Module 8 assessment unit is calculated as the weighted average of the

assessment items. If a candidate's overall mark for the assessment unit is the pass mark (50%) or higher, they will not be permitted to re-sit individual assessment items within the assessment unit. If a candidate fails the Module 8 assessment unit as a whole, they will need to resit the whole Module 8 assessment unit including all Module 8 assessment items.

6.   Consideration of mitigating circumstances

A candidate's final outcome will first be considered using the classification rules/final outcome rules as described above in section 4. The exam board will then consider any further information they have on individual circumstances.

Where a candidate or candidates have made a submission, under Part 13 of the Regulations for Conduct of University Examinations, that unforeseen circumstances may have had an impact on their performance in an examination, a subset of the board (the 'Mitigating Circumstances Panel') will meet to discuss the individual applications and band the seriousness of each application on a scale of 1-3 with 1 indicating minor impact, 2 indicating moderate impact, and 3 indicating very serious impact. The Panel will evaluate, on the basis of the information provided to it, the relevance of the circumstances to examinations and assessment, and the strength of the evidence provided in support. Examiners will also note whether all or a subset of papers were affected, being aware that it is possible for circumstances to have different levels of impact on different papers. The banding information will be used at the final board of examiners meeting to decide whether and how to adjust a candidate's results. Further information on the procedure is provided in the *Examination and Assessment Framework, Annex E* and information for students is provided at https://www.ox.ac.uk/students/academic/exams/problems-completing-your-assessment

7.   Details of examiners and rules on communicating with examiners

The names, positions and institutions of the internal and external Exam Board members are provided via Canvas. Candidates should not under any circumstances seek to make contact with individual internal or external examiners in relation to any examination matters.