



UNIVERSITY OF OXFORD

DEPARTMENT OF MATERIALS

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To: All Candidates for Part I Examinations in Materials Science 2020/21

From: Professor Keyna O'Reilly, Chair of Examiners 2021.

Subject: Part I Examinations – Trinity 2021

Date: Tuesday, 09 March 2021

cc: Director of Undergraduate Studies, Tutorial Fellows

Information on the Part I Examination 2020-21

I am writing with information about the arrangements for your forthcoming examination and to provide you with a copy of the Examination Conventions for 2021.

The Examiners for the Trinity 2021 exams are: Prof. Hazel Assender, Prof. Nicole Grobert, Prof. Pete Nellist, Prof. Keyna O'Reilly (Chair), Prof. Jason Smith and Prof. Richard Todd. The external examiners are Prof. Peter Haynes, Imperial College London, and Prof. Geraint Williams, Swansea University.

Candidates are reminded that in order to preserve the independence of the examiners, **you are not allowed** to contact them directly about matters relating to the content of the exams or the marking of papers. Any communication must be via your college, who will, if the matter is deemed of importance, contact the Proctors. The Proctors in turn communicate with the Chair of Examiners. If you have any queries about the Examinations or anything related to the Examinations, for example illness or personal issues, please don't hesitate to seek further advice from your College tutor, or one of the Department's academic support staff as listed in your course handbook.

Examination Conventions

The appropriate Examination Conventions for your degree course are enclosed. Please ensure you read the Conventions thoroughly. Please note that any communication to the Proctors about such matters should be via **your College**.

Open-Book Exam Papers

The papers will be sat as online open-book examinations via the online assessment platform, [Inspira](#). The mode of completion of each of these papers will be **fully handwritten answers** which will need to be scanned and uploaded. (It is possible to apply for an alternative mode on the grounds of disability or medical condition as an

exam adjustment.) For these online exams, there will be a technical time allowance of 30 minutes per exam for upload and technical difficulties.

There is additional information and guidance available at www.ox.ac.uk/students/academic/exams/open-book/trinity-term and you are recommended to familiarise yourself with the process by completing a practice submission, including creating the file by scanning. The recommended app for scanning is MS Lens which is available as a free download (others may be used if you prefer.) For each exam you will be required to compile your answers to all questions into **one single pdf file** for submission (do check the order of your pages!). Note that the maximum file size for submission is 1 GB. Attached is a guide about open-book exams using Inspira.

The formal timetable for the exam papers will be released by Examination Schools shortly. It is anticipated that the start time for all papers is 9.30 am British Summer Time (**GMT+1**). If you are in any other time zone, please refer to the information at www.ox.ac.uk/students/academic/exams/open-book/trinity-term for clarity.

Each paper will last for 3 hours with an additional 30 minutes 'technical time' to allow for subsequent scanning and uploading to Inspira of the completed script.

The structure, content and academic effort will be similar to conventional exam papers: these typically include questions designed to assess understanding rather than memory-recall of facts – the questions in the open-book papers will continue in this style.

The University has an honour code for open-book exams:

www.ox.ac.uk/students/academic/exams/open-book/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.

If you believe your academic performance has been seriously affected by COVID-19 situation and/or a medical or personal issue you can submit a mitigating circumstances notice to your examiners (MCE) via your college. You should also follow this process if mitigating circumstances impact on your ability to upload your exam response within the time permitted. For further details on how to submit a notice, see the [Problems completing your assessment](#) page.

Format of Exam Papers

The **general papers** will be of the same format as in recent years. That is, there will be eight questions on each paper, of which you are to answer five. The total number of marks for each paper is 100. Each question will therefore be worth 20 marks. Questions will be sub-divided into sections with the breakdown of marks that the examiners expect to give to each part of each question indicated.

As in previous years, the general paper questions are, where possible, likely to have some mathematical or analytical content.

There will be two **options papers**. Materials Options papers comprise one section for each twelve-hour Options lecture course, each section containing two questions: candidates are required to answer one question from each of any three sections and a fourth question drawn from any one of the same three sections. The total number of marks available on each option paper is 100, and all questions carry equal marks. Questions will be sub-divided into sections with the breakdown of marks that the examiners expect to give to each part of each question indicated.

As in previous years, the option paper questions are, where possible, likely to have some mathematical or analytical content.

NOTE: For all papers, each question is to be started on a new page.

Recording the questions you attempt:

The rubric on each paper indicates a prescribed number of answers required (e.g. "candidates are required to submit answers to no more than (x) questions"). You are asked to indicate on a covering sheet which questions, up to the prescribed number, you are submitting for marking. If this information is not provided then the examiners will mark the first (x) questions in numerical order by question number. The examiners will NOT mark questions in excess of the prescribed number. If fewer questions than the prescribed number are attempted:

- i) each missing attempt will be assigned a mark of zero,
- ii) for those questions that are attempted **no** marks beyond the maximum per question indicated on the paper will be awarded and
- iii) the mark for the paper will still be calculated out of 100.

In addition, for the Materials Options Papers, as per the rubric, the examiners will mark questions from only **three** sections. Should a candidate attempt questions from more than three sections the examiners will mark those questions from the first three sections in the order listed by the candidate on the covering page. If the information is not provided on a covering page then the examiners will mark the sections in alphabetical order by section delineator (section A, section B, etc.).

In the event that you feel there is a mistake or error in a question, please note your concerns at the start of your answer and, if necessary, state your understanding of the question. The examiners will consider the validity of the error and assess the impact of the error on candidates' choice of questions and on the answers written by those who attempted a question that contained an error, and will take this impact into account when marking the paper.

Allocation of Marks in Part I Materials Science.

PART I	General Paper 1 Structure and Transformation of Materials	100
	General Paper 2 Electronic Properties of Materials	100
	General Paper 3: Mechanical Properties	100
	General Paper 4 Engineering Applications of Materials	100
	Options Paper 1	100
	Options Paper 2	100
	Laboratory Practicals and Industrial Visits	80
	Engineering and Society Portfolio: Business Plan*	20
	Team Design Project	50
	Introduction to Modelling of Materials module	25
	Characterisation of Materials or Atomistic Modelling module	25
	PART I TOTAL	800

* - or Language option or Supplementary subject where taken.