



UNIVERSITY OF OXFORD

# DEPARTMENT OF MATERIALS

PARKS ROAD OXFORD OX1 3PH · Telephone: (01865) 273700

**To: All Candidates for Part I Examinations in Materials Science 2018/19**

**From: Professor Roger Reed, Chair of Examiners 2019.**

**Subject: Part I Examinations Trinity 2019**

**Date: Friday, 01 March 2019**

**cc: Director of Studies, Tutorial Fellows**

---

## Information on the Part I Examination 2018-19

I am writing with information about the arrangements for your forthcoming examination and to provide you with a copy of the Examination Conventions for 2019.

The Examiners in Trinity 2019 are: Prof. Simon Benjamin, Prof. Martin Castell, Prof. Keyna O'Reilly, Prof. Roger Reed (Chair), Prof. Angus Wilkinson and Prof. Jonathan Yates. The external examiners are Prof. Alison Davenport, University of Birmingham, and Prof. Peter Haynes, Imperial College London.

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 done via **your College**.

## Format of the Examination Papers

Past papers can be found on WebLearn at <https://weblearn.ox.ac.uk/portal/hierarchy/oxam> (or go to the University's homepage, click on "Oxford Students – Academic Matters" and select "OXAM" from the drop down list of Systems and Services).

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.

**NOTE: Each question is to be started in a new answer booklet.**

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

### **ALL Materials papers:**

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 will be asked to indicate on a cover sheet which questions, up to the prescribed number, you are submitting for marking. If the cover slip is not completed 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 cover slip. If the cover slip is not completed then the examiners will mark the sections in alphabetical order by section delineator (section A, section B, etc.).

An examiner acquainted with the particulars of the relevant question paper will be present for half an hour at the start of each written examination to address any questions concerning the paper.

### **Timetable of the Examination Papers**

It is hoped that the timing of the examination papers will be similar to that of last year (see below). However, **THIS CANNOT BE CONFIRMED UNTIL THE EXAMINATION SCHOOLS PUBLISH THE OFFICIAL TIMETABLE, AND MAY BE SUBJECT TO CHANGE.**

|               |               |                 |
|---------------|---------------|-----------------|
| <b>Week 6</b> | Monday -      | General Paper 1 |
|               | Tuesday -     | General Paper 2 |
|               | Thursday -    | General Paper 3 |
|               | Friday -      | General Paper 4 |
|               | <b>Week 7</b> | Monday -        |
|               | Tuesday -     | Options Paper 2 |

The exact timetable of all the exams will be confirmed shortly by the Examination Schools.

### Provision of Mathematical Tables for Examinations

SMP Advanced Tables will be available for all written Materials papers.

### Use of Calculators

The only types of calculators that may be used in Materials Science examinations are from the following series:

CASIO fx-83  
CASIO fx-85  
SHARP EL-531

Candidates are required to clear any user-entered data or programmes from memories immediately before the exam begins. The examiners may inspect any calculator during the course of an exam.

### Allocation of Marks in Part I Materials Science.

|               |   |            |
|---------------|---|------------|
| <b>PART I</b> | 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         |
|               | Characterisation or Modelling options module              | 50         |
|               | <b>PART I TOTAL</b>                                       | <b>800</b> |

\* - or Language option or Supplementary subject where taken.