

DEPARTMENT OF MATERIALS

DIVISION OF MATHEMATICAL, PHYSICAL AND LIFE SCIENCES

Lecture List for Trinity Term 2021

Lectures begin on the first possible day after the beginning of Full Term (Sunday 25 April) unless otherwise stated.

All lectures will be available as online recordings via Canvas (www.canvas.ox.ac.uk). It is important that the intended sequence of lectures is followed both within and across lecture courses. The schedule below includes a recommended time slot to view the lectures. Following a series of lectures, a Question & Answer session is held by the lecturer, via MS Teams, to provide the opportunity to submit questions for the lecturer to address as would normally take place within a live lecture. Links to the Q&A sessions will be available via the respective Canvas sites, as indicated.

All times are [current UK times](#)

<i>Subject</i>	<i>Lecturer</i>	<i>Recommended Slot – start time</i>	<i>Deadline by when recording must be viewed</i>	<i>Time of lecturer's Q&A session (Live sessions via Teams)</i>	<i>Canvas site where details may be found</i>
FIRST YEAR					
"Guidance on the Examination Process" Workshop	Prof. T.J. Marrow	Live session via Teams: Wk0: Tues 20 Apr, 10.00am			MEng Materials Science - Prelims
Introduction to Practicals	Prof. S. Lozano-Perez	Live session via Teams: Wk1: Mon 26 Apr, 12noon			Y1 Practical Classes
Practical Classes	Various				Y1 Practical Classes
FHS Y2 Options Briefing	Prof. T.J. Marrow, Ms P. Moss	Live session via Teams: Wk 8: Tues 15 Jun, 12noon – 1.00pm			MEng Materials Science - Prelims
Materials Science 1: Physical Foundations of Materials					
Wave Mechanics, Quantum Theory and Bonding	Prof. P.D. Nellist	Wk1: Mon 26 Apr, 10.00am Wed 28 Apr, 10.00am Thurs 29 Apr, 10.00am Fri 30 Apr, 10.00am	Wk1: Mon 26 Apr, 11.00am Wed 28 Apr, 11.00am Thurs 29 Apr, 11.00am Fri 30 Apr, 11.00am	Wk 1: Fri 30 Apr, 12noon (up to 60mins)	Materials Science 1 – Physical Foundations of Materials

Subject	Lecturer	Recommended Slot – start time	Deadline by when recording must be viewed	Time of lecturer's Q&A session (Live sessions via Teams)	Canvas site where details may be found
Materials Science 2: Structure and Mechanical Properties of Materials					
Mechanical Properties	Prof. D.E.J. Armstrong	Wk1: Mon 26 Apr, 11.00am Tues 27 Apr, 11.00am Wed 28 Apr, 11.00am Thurs 29 Apr, 11.00am Wk2: Mon 3 May, 11.00am Tues 4 May, 11.00am Wed 5 May, 11.00am Thurs 6 May, 11.00am Wk3: Mon 10 May, 11.00am Tues 11 May, 11.00am Wed 12 May, 11.00am Thurs 13 May, 11.00am	Wk1: Mon 26 Apr, 12noon Tues 27 Apr, 12noon Wed 28 Apr, 12noon Thurs 29 Apr, 12noon Wk2: Mon 3 May, 12noon Tues 4 May, 12noon Wed 5 May, 12noon Thurs 6 May, 12noon Wk3: Mon 10 May, 12noon Tues 11 May, 12noon Wed 12 May, 12noon Thurs 13 May, 12noon	Wk1: Thurs 29 Apr, 12noon (up to 60mins) Wk2: Thurs 6 May, 12noon (up to 60mins) Wk3: Thurs 13 May, 12noon (up to 60mins)	Materials Science 2: Structure & Mechanical Properties of Materials
Materials Science 3: Transforming Materials					
Microstructure and Processing of Materials II	Prof. C.R.M. Grovenor	Wk1: Tues 27 Apr, 8.00am Wed 28 Apr, 8.00am Thurs 29 Apr, 8.00am Fri 30 Apr, 8.00am Wk2: Tues 4 May, 8.00am Wed 5 May, 8.00am Thurs 6 May, 8.00am Fri 7 May, 8.00am	Wk1: Tues 27 Apr, 9.00am Wed 28 Apr, 9.00am Thurs 29 Apr, 9.00am Fri 30 Apr, 9.00am Wk2: Tues 4 May, 9.00am Wed 5 May, 9.00am Thurs 6 May, 9.00am Fri 7 May, 9.00am	Wk1: Fri 30 Apr, 9.00am (up to 60mins) Wk2: Fri 7 May, 9.00am (up to 60mins)	Materials Science 3: Transforming Materials
Introduction to Nanomaterials	Dr B. Maciejewska & Dr S.P. Zankowski	Wk2: Tues 4 May, 10.00am Wed 5 May, 10.00am Thurs 6 May, 10.00am Fri 7 May, 10.00am Wk3: Tues 11 May, 10.00am Wed 12 May, 10.00am Thurs 13 May, 10.00am Fri 14 May, 10.00am	Wk2: Tues 4 May, 11.00am Wed 5 May, 11.00am Thurs 6 May, 11.00am Fri 7 May, 11.00am Wk3: Tues 11 May, 11.00am Wed 12 May, 11.00am Thurs 13 May, 11.00am Fri 14 May, 11.00am	Wk2: Fri 7 May, 12noon (up to 60mins) Wk3: Fri 14 May, 12noon (up to 60mins)	Materials Science 3: Transforming Materials

Subject	Lecturer	Recommended Slot – start time	Deadline by when recording must be viewed	Time of lecturer's Q&A session (Live sessions via Teams)	Canvas site where details may be found
SECOND YEAR					
GP1: Lifecycle, Processing & Engineering of Materials					
Selection & Production of Engineering Materials	Prof. H.E. Assender & Prof. M.L. Galano	Wk1: Tues 27 Apr, 9.00am Wed 28 Apr, 9.00am Thurs 29 Apr, 9.00am Wk2: Tues 4 May, 9.00am Wed 5 May, 9.00am Thurs 6 May, 9.00am	Wk1: Tues 27 Apr, 10.00am Wed 28 Apr, 10.00am Thurs 29 Apr, 10.00am Wk2: Tues 4 May, 10.00am Wed 5 May, 10.00am Thurs 6 May, 10.00am	Wk1: Thurs 29 Apr, 10.00am (up to 45mins) Wk2: Thurs 6 May, 10.00am (up to 45mins)	GP1: Lifecycle, Processing & Engineering of Materials
Processing for Control of Materials Properties and Performance	Prof. R.C. Reed & Prof. A.J. Wilkinson	Wk2: Tues 4 May, 8.00am Wed 5 May, 8.00am Wk3: Tues 11 May, 8.00am Wed 12 May, 8.00am Thurs 13 May, 8.00am Wk4: Tues 18 May, 8.00am Wed 19 May, 8.00am Thurs 20 May, 8.00am Wk5: Tues 25 May, 8.00am Wed 26 May, 8.00am Thurs 27 May, 8.00am Wk6: Tues 1 Jun, 8.00am Wed 2 Jun, 8.00am Thurs 3 Jun, 8.00am Wk7: Tues 8 Jun, 8.00am Wed 9 Jun, 8.00am	Wk2: Tues 4 May, 9.00am Wed 5 May, 9.00am Wk3: Tues 11 May, 9.00am Wed 12 May, 9.00am Thurs 13 May, 9.00am Wk4: Tues 18 May, 9.00am Wed 19 May, 9.00am Thurs 20 May, 9.00am Wk5: Tues 25 May, 9.00am Wed 26 May, 9.00am Thurs 27 May, 8.00am Wk6: Tues 1 Jun, 9.00am Wed 2 Jun, 9.00am Thurs 3 Jun, 9.00am Wk7: Tues 8 Jun, 9.00am Wed 9 Jun, 9.00am	Wk3: Tues 11 May, 10.00am (up to 45mins) Wk3: Thurs 13 May, 10.00am (up to 30mins) Wk4: Thurs 20 May, 10.00am (up to 45mins) Wk5: Thurs 27 May, 10.00am (up to 45mins) Wk6: Thurs 3 Jun, 10.00am (up to 45mins) Wk7: Wed 9 Jun, 10.00am (up to 30mins)	GP1: Lifecycle, Processing & Engineering of Materials
GP2: Electronic Properties of Materials					
Magnetic Properties of Materials	Prof. J.R. Yates	Wk1: Tues 27 Apr, 11.00am Wed 28 Apr, 11.00am Thurs 29 Apr, 11.00am Wk2: Tues 4 May, 11.00am Thurs 6 May, 11.00am Wk3: Tues 11 May, 11.00am Wed 12 May, 11.00am Thurs 13 May, 11.00am Wk4: Tues 18 May, 11.00am Thurs 20 May, 11.00am	Wk1: Tues 27 Apr, 12noon Wed 28 Apr, 12noon Thurs 29 Apr, 12noon Wk2: Tues 4 May, 12noon Thurs 6 May, 12noon Wk3: Tues 11 May, 12noon Wed 12 May, 12noon Thurs 13 May, 12noon Wk4: Tues 18 May, 12noon Thurs 20 May, 12noon	Wk1: Thurs 29 Apr, 12noon (up to 45mins) Wk2: Thurs 6 May, 12noon (up to 30mins) Wk3: Thurs 13 May, 12noon (up to 45mins) Wk4: Thurs 20 May, 12noon (up to 30mins)	GP2: Electronic Properties of Materials

Subject	Lecturer	Recommended Slot – start time	Deadline by when recording must be viewed	Time of lecturer's Q&A session (Live sessions via Teams)	Canvas site where details may be found
Electrical & Optical Properties of Materials	Prof. M.R. Castell	Wk5: Tues 25 May, 9.00am Thurs 26 May, 9.00am Fri 28 May, 9.00am Wk6: Tues 1 Jun, 9.00am Thurs 3 Jun, 9.00am Fri 4 Jun, 9.00am Wk7: Tues 8 Jun, 9.00am Thurs 10 Jun, 9.00am	Wk5: Tues 25 May, 10.00am Thurs 26 May, 10.00am Fri 28 May, 10.00am Wk6: Tues 1 Jun, 10.00am Thurs 3 Jun, 10.00am Fri 4 Jun, 10.00am Wk7: Tues 8 Jun, 10.00am Thurs 10 Jun, 10.00am	Wk5: Fri 28 May, 10.00am (up to 45mins) Wk6: Fri 4 Jun, 10.00am (up to 45mins) Wk7: Thurs 10 Jun, 11.00am (up to 30mins)	GP2: Electronic Properties of Materials
GP3: Mechanical Properties of Materials					
Structural Failure of Materials II	Prof. R.C. Reed	Wk1: Thurs 29 Apr, 8.00am Fri 30 Apr, 8.00am Wk2: Mon 3 May, 8.00am Thurs 6 May, 8.00am Fri 7 May, 8.00am Wk3: Mon 10 May, 8.00am Fri 14 May, 8.00am Wk4: Mon 17 May, 8.00am	Wk1: Thurs 29 Apr, 9.00am Fri 30 Apr, 9.00am Wk2: Mon 3 May, 9.00am Thurs 6 May, 9.00am Fri 7 May, 9.00am Wk3: Mon 10 May, 9.00am Fri 14 May, 9.00am Wk4: Mon 17 May, 9.00am	Wk2: Mon 3 May, 10.00am (up to 45mins) Wk3: Mon 10 May, 10.00am (up to 45mins) Wk4: Mon 17 May, 10.00am (up to 30mins)	GP3: Mechanical Properties of Materials
GP4: Structure & Thermodynamics of Materials					
Structural & Compositional Characterisation of Materials II	Prof. M.P. Moody	Wk4: Mon 17 May, 11.00am Wed 19 May, 11.00am Fri 21 May, 11.00am Wk5: Mon 24 May, 11.00am Wed 26 May, 11.00am Fri 28 May, 11.00am Wk6: Wed 2 Jun, 11.00am Fri 4 Jun, 11.00am	Wk4: Mon 17 May, 12noon Wed 19 May, 12noon Fri 21 May, 12noon Wk5: Mon 24 May, 12noon Wed 26 May, 12noon Fri 28 May, 12noon Wk6: Wed 2 Jun, 12noon Fri 4 Jun, 12noon	Wk4: Fri 21 May, 12noon (up to 45mins) Wk5: Fri 28 May, 12noon (up to 45mins) Wk6: Fri 4 Jun, 12noon (up to 30mins)	GP4: Structure & Thermodynamics of Materials
Other Lectures					
Introduction to Practicals	Prof. S. Lozano-Perez	Live session via Teams: Wk1: Mon 26 Apr, 10.00am			Y2 Practical Classes
Practical Classes	Various				Y2 Practical Classes
Presentation Skills Workshop for Business Plan Talks	Prof. H Bhaskaran	Live session via Teams (tbc): Wk3: Fri 14 May, 2.30-4.00pm			Entrepreneurship Coursework

Subject	Lecturer	Recommended Slot – start time	Deadline by when recording must be viewed	Time of lecturer's Q&A session (Live sessions via Teams)	Canvas site where details may be found
Business Plan Presentations	Mr S.P. Newbury (Williams), Mr H. Dickinson (Nortal) & Prof. H. Bhaskaran	Live session via Teams: Wk6: Fri 4 June, 1.30pm (tbc)			Entrepreneurship Coursework
Industrial 'Visit'	Dr E. Liotti	Live session via Teams: Wk3: Thurs 13 May, 2.00pm AND Wk5: Thurs 27 May, 11.30am (tbc)			MEng Materials Science - Part I

THIRD YEAR					
Michaelmas Term OP1 - Lectures					
^{1,2} Nanomaterials	Prof. N. Grobert	Wk1: Mon 26 Apr, 9.00am Wed 28 Apr, 9.00am	Wk1: Wed 26 Apr, 10.00am Wed 28 Apr, 10.00am	Wk1: Wed 28 Apr, 12noon (up to 45mins)	OP1 – Options Paper 1
Michaelmas Term OP1 - Classes					
Nanomaterials	Class Leader				
^{1,3} Class 1	Dr B. Maciejewska	Live sessions via Teams: Wk2: Tues 4 May, 10.00am Wed 5 May, 10.00am			OP1 – Options Paper 1
Options Paper 2 - Classes					
³ Biomaterials & Natural Materials	Class Lecturer				
Class 2	Prof. J.T. Czernuszka	Live sessions via Teams: Wk1: Mon 26 Apr, 10.00am Tues 27 Apr, 9.00am Wed 5 May, 2.00pm			OP2 – Options Paper 2

Subject	Lecturer	Recommended Slot – start time	Deadline by when recording must be viewed	Time of lecturer's Q&A session (Live sessions via Teams)	Canvas site where details may be found
³ Devices Class 2	Class Lecturer Prof. S.C. Speller	Live sessions via Teams: Wk1: Mon 26 Apr, 2.00pm Tues 27 Apr, 2.00pm Wed 28 Apr, 4.00pm Thurs 29 Apr, 9.00am			OP2 – Options Paper 2
³ Advanced Engineering Alloys & Composites Class 2	Class Lecturer Prof. D.E.J. Armstrong	Live sessions via Teams: Wk1: Mon 26 Apr, 4.00pm Tues 27 Apr, 11.00am Thurs 29 Apr, 2.00pm Fri 30 Apr, 11.00am			OP2 – Options Paper 2
Other Lectures					
“Guidance on the Examination Process” Workshop	Prof. T.J. Marrow	Live session via Teams: Wk0: Wed 21 April, 10.00am			MEng Materials Science - Part I
Part II Presentations	Part II students	Live session via Teams: Wk2: Thursday 6 May, 10.00am to 15.10pm			MEng Materials Science - Part I

FOURTH YEAR					
Other Lectures					
Part II Presentations	Prof. K.A.Q. O'Reilly & Part II students	Live session via Teams: Wk2: Thursday 6 May, 10.00am to 15.10pm			Part II Research Project

Subject	Lecturer	Recommended Slot – start time	Deadline by when recording must be viewed	Time of lecturer's Q&A session (Live sessions via Teams)	Canvas site where details may be found
POSTGRADUATE					
Please also see the MPLS training webpages: www.mpls.ox.ac.uk/training/pgr					
Postgraduate training					
Safety Lecture (Compulsory for all new research workers)	Mr I.P. Bishop, Dept Safety Officer	Invitation will be sent directly to those who need to attend			PGR Teaching& Training
Hydrofluoric Acid Lectures	Mrs C. Foldbjerg Holdway	Live session via Teams: Please contact Christina for details (christina.foldbjerg@materials.ox.ac.uk)			
Gas Canister Safety Briefing	Mrs C. Foldbjerg Holdway	Live session via Teams: Please contact Christina for details (christina.foldbjerg@materials.ox.ac.uk)			
Laser Safety Training	University Safety Office & Physics	Please see https://safety.admin.ox.ac.uk/laser-safety (Safety Office) or https://www2.physics.ox.ac.uk/laser-safety (Physics)			
Preparing an article for submission to a materials journal	Prof. R.I. Todd	Wk6: Wed 2 June, 10.00am	Wk6: Wed 2 June, 11.00am	Wk6: Wed 2 June, 11.00am (up to 20mins)	PGR Teaching& Training
Postgraduate lecture courses					
Spectroscopy with the (S)TEM	Dr A. Mostaed, Dr R.J. Nicholls & Prof. S. Lozano-Perez	Wk3: Tues 11 May, 10.00am Thurs 13 May, 10.00am Fri 14 May, 10.00am Wk4: Tues 18 May, 10.00am Thurs 20 May, 10.00am Wk5: Tues 25 May, 10.00am Thurs 27 May, 10.00am Fri 28 May, 10.00am	Wk3: Tues 11 May, 11.00am Thurs 13 May, 11.00am Fri 14 May, 11.00am Wk4: Tues 18 May, 11.00am Thurs 20 May, 11.00am Wk5: Tues 25 May, 11.00am Thurs 27 May, 11.00am Fri 28 May, 11.00am	Wk3: Fri 14 May, 11.00am (up to 45mins) Wk4: Tues 18 May, 11.00am (up to 15mins) Wk5: Tues 25 May, 11.00am (up to 30mins) Fri 28 May, 11.00am (up to 30mins)	PGR Teaching& Training
^{1,2,4}Options Lectures and Classes					
See details for Third Year above					

Subject	Lecturer	Recommended Slot – start time	Deadline by when recording must be viewed	Time of lecturer's Q&A session (Live sessions via Teams)	Canvas site where details may be found
Research Colloquia					
Materials Colloquia	TBC	Live sessions via Teams: Wk1: Thurs 29 Apr, 4.00pm Wk2: Thurs 6 May, 4.00pm Wk3: Thurs 13 May, 4.00pm Wk4: Thurs 20 May, 4.00pm			As circulated via notices@materials.ox.ac.uk
QIP Seminars		Tbc			
MML Seminars		Tbc			

¹These are the outstanding lectures and associated classes from the OP1 course that started in MT, postponed due to ill-health

²The lecture courses each have three hours of associated classes

³Students attend one class in each week and need to register for a specific class via [WebLearn](#)

⁴This course is also offered to undergraduates as a 3rd year option. All postgraduates are welcome to take the course. They may select it as one of the two assessed courses in the first year provided they have not already taken the course as an undergraduate.