

DEPARTMENT OF MATERIALS

DIVISION OF MATHEMATICAL, PHYSICAL AND LIFE SCIENCES

Lecture List for Michaelmas Term 2025

Lectures begin on the first possible day after the beginning of Full Term (Sunday, 12 October) unless otherwise stated

All lectures begin on the hour and finish at five minutes before the next hour.

No food or drink (except bottled water) is permitted in the lecture theatres.

Timetable for Materials Science

Key to Teaching Venue Abbreviations:

HRLT	Hume-Rothery Lecture Theatre, Hume-Rothery Building
BRLT	Banbury Road Lecture Theatre, 21 Banbury Road
LR8 IEB	Lecture Room 8, Information Engineering Building
ETBCR	ETB Committee Room, Engineering Technology Building
BRCR	Banbury Road Conference Room, 21 Banbury Road
HRMR	Hume-Rothery Meeting Room, Hume-Rothery Building
HBTL	Holder Building Teaching Labs, Holder Building
HRF	Hume-Rothery Foyer, Hume-Rothery Building
RR	Rex Richards Room 40.08, Rex Richards Building
LR3	Lecture Room 3, Thom Building, Engineering Science

Subject	Lecturer	Time	Place
FIRST YEAR			
Induction Course	Prof. T.J. Marrow & others	F. 1.15-5.00 (wk 0)	HRLT
Introduction to Prelims Programme	Prof. T.J. Marrow	M. 12 (wk 1)	HRLT
Introduction to Maths and Computing for Materials Science	Prof. S.C. Benjamin	M. 10:30 (wk 1)	HRLT
Introduction to Practicals	Prof. R.S Bonilla	M. 10 (wk 1)	HRLT
Introduction to Computing	Dr P.J. Warren	T.W. Th. F. 2-5 (wk 1)	HBTL
Practical Classes	Various staff	Th. F. 2-5 (wks 2-8)	HBTL
Teaching, Study Skills & Learning Development	Prof. T.J. Marrow	W. 11 (wk 4)	HRLT
The Institute of Materials - Benefits of Student Membership	J Graham – Institute of Materials	F. 10 (wk 6)	HRLT
Workshop on (i) Writing a Full Report on a Practical and (ii) Keeping a Good Laboratory Notebook	Prof. R.S Bonilla	T.9-10:30 (wk 2)	HRLT
Introduction to Errors in Measurement	Prof. J.M. Smith	Th 12 (wk 1) F 9 (wk 1)	HRLT
Crystal Model Make & Keep	Prof. M.R. Castell	<i>Recommended view time of online lectures</i> T. 9.00-10.30 (wk 3)	
Crystallography Classes	Prof R. Nicholls	T. 9-12 (wks, 4 6,8)	BRCR (wk 4) LR3 Thom Building (6 & 8)
Computing for Materials Science MATLAB Classes	Dr Z. Goodwin + Prof. J.R. Yates	T. 9-12 (wks 5,7)	RR and BRCR
Summer Placements Briefing	Prof J Marrow	M. 12 (wk 4)	HRLT
Materials Science 1: Physical Foundations of Materials			
The Study of Crystalline Materials by Diffraction	Prof. P.D. Nellist	W. Th. F. 11 (wk 1) M. W. Th. F. 11 (wk 2) M. 11 (wk 3)	HRLT
Materials Science 2: Structure and Mechanical Properties of Materials			
Elastic Deformation	Prof. A.J. Wilkinson	M. 9 (wk 2) W. F. 12 (wks 2-3) M 12 (wk 3) T. 11 (wks 2-3)	HRLT
Structures of Crystalline and Glassy Materials	Prof M.L. Galano + Prof S. Islam	F. 12 (wk 4) W. Th. 12(wks 5-6) M. 12 (wk 6) M. 12 (wk 7) W. 12. (wk 7)	HRLT
Materials Science 3: Transforming Materials			
Thermodynamics		Th. 12 (wk 2) Th. F. 9 (wk 3) W. 10 (wk 3) M. W. Th. F. 9 (wk 4)	HRLT

Subject	Lecturer	Time	Place
Microstructure & Processing of Materials I	Prof K. Marquardt	M. 9 (wks 5,7) W. 9 (wks 5) F. 9 (wks 6-7) W. Th. 9 (wk 7) W. 9 (wk 8)	HRLT
Introduction to Nanomaterials	Prof. N. Grobert	M. 10 (wk 5) Th. F. 9(wks 5) M. 9 (wk 6) Th. F. 10 (wk 7) M. 9-11 (wk 8)	HRLT
Mathematics for Materials Science			
Ordinary and Partial Differentiation	Dr E. Liberti	<i>Recommended view time of online lectures</i> T. 10 (wk 1) W. 9 (wk 1) Th. 9 (wk 1) M. 12 (wk 2) W. Th. 9 (wk 2)	
		<i>Live Q&A workshop</i> F. 12 (wk 1) F. 9 (wk 2)	HRLT
Vectors & Matrices	Prof. S.C. Benjamin	<i>Recommended view time of online lectures</i> M. 11 (wks 4,6) M. 9 (wk 3) W. 11 (wks 3-6) Th. 11 (wks 3,5-6) Th. 10 (wk 4)	
		<i>Live Q&A workshop</i> Th. 12 (wk 4) F. 11 (wks 5) F, 12 (wk 6) (LR8)	HRLT

SECOND YEAR			
GP1: Lifecycle, Processing & Engineering of Materials			
Selection & Production of Engineering Materials I	Prof. H.E. Assender & Prof. M.L. Galano	Th. 10 (wk 1) W. 12, Th.10 F 10 (wk 2)	BRLT
GP2: Electronic Properties of Materials			

Subject	Lecturer	Time	Place
Electronic Structure of Materials	Prof. J.R. Yates	M. 12 (wks 1-3,5) Th. 12 (wks 1-4) F. 12 (wks 1-4)	BRLT
GP3: Mechanical Properties of Materials			
Elastic Deformation of Materials	Prof. A. Wilkinson & Dr T. Pirzada	M. W. 9 (wks 4-7) Th. 9 (wks 5,7)	BRLT
GP4: Structure & Thermodynamics of Materials			
Statistical Mechanics and Thermal Properties	Dr. Ben Winchester	Th. 10 (wks 5,) F. 12 (wks 5-6) M. 12 (wks 6-7) W. 12 (wk 6-7) Th. 11 (wk 8)	BRLT
Phase Transformations	Prof. K. O'Reilly	T. 10 (wks 2-5,7) W. 10 (wks 2-3,5,7) Th. 9 (wk 2) Th. 10 (wks 3, 4,6) Th. 12 (wk5) M. 10 (wk 4) F. 10 (wk 7)	BRLT
Other Lectures			
Introduction to the Part I Materials Programme	Prof. T.J. Marrow	M. 10 (wk 1)	BRLT
Introduction to Practicals	Prof. R. S. Bonilla	M. 9.00 (wk 1)	BRLT
Mathematics – Partial Differential Equations & Fourier Series, and Tensors	Prof S.C. Benjamin + Prof. P. Nellist	T. F. 9 (wks 1-2, 4) F. 9 (wk 3) M 12 (Wk 4) W, 12 (wk 5) F. 9 (wk 5-6) W, 10 (wk 6)	BRLT
Entrepreneurship/Business Plan – workshop on 'Teams'	Dr E. Williams	F. 2:30–4:30 (wk 3)	Via Zoom
Entrepreneurship: Business plan briefing	Dr S.M. Wilkinson	Th. 2–3.30 (wk 8)	BRLT
Entrepreneurship (Understanding Intellectual Property)	Enterprising Oxford	TBC	
Entrepreneurship / Business Plan (Workshop on 'Finance' & 'The Business Model Canvas')	Mr S.P. Newbury (Williams)	Th. 10. (wk 8)	HRLT
Introduction to Industrial Visits	Prof. R.A. House	W. 9 (wk 1)	BRLT
Practical Classes	Various staff	M. T. W. 2-5 (wks 1-8)	HBTL
Industrial Visit	Prof. R.A. House	Th. 1-6 (wk 5)	HRF
Poster presentation skills workshop	Poster presentation skills workshop	tbc	tbc

Subject	Lecturer	Time	Place
Summer Placements Briefing	Prof. H.E. Assender	M. 12 (wk 4)	HRLT
Supplementary Subjects			
² History and Philosophy of Science: The Origins of Science	Prof R. Iliffe & Dr S. Allen	T. 12 (wks 1-8)	Lecture Theatre History Faculty, George Street
^{1,2} Quantum Chemistry	Prof D.E. Manolopoulos, Prof S. R. Mackenzie, Prof J.E. Mc Grady & Dr W. Barford	T. F. 11 (wks 2-8) Wk 1 W 11Am Wk 2 Wd 11	Physical and Theoretical Chemistry Laboratory

THIRD YEAR			
Options Paper 1			
² Materials & Devices for Optics & Optoelectronics	Dr. Gareth Jones	M. 10, Th. 9 (wk 4) W. 12 (wk 4) M. 10 (wk 5) T. 12 (wk 7) M. 10, W. 12, Th. 9 (wks 7-8) T. 9 (wk 8)	LR8
Physics and chemistry of crystalline interfaces	Prof K. Marquardt + Dr Tamsin Whitfield	M. 11 W. 11, Th. 9, F. 10 (wk 3) T. 11 (wks 4-5,7-) W. 11 (wks 4-5,7-8) M. 12 (wk 8)	LR8
² Magnetic and Superconducting Materials	Prof. S.C. Speller & Dr. M. Slota	M. 9, W. 9, F. 10 (wks 4-5,7) T. 9 (wks 4-5) Th. 9 (wk 5)	LR8
² Microstructural Control in Engineering Alloys	Prof. K.A.Q. O'Reilly & Dr E. Liotti	W. 12, Th. 10, F. 12 (wk 3) M. 12, Th. 10, F. 12 (wks 4-5,7)	LR8
^{2,3} Biomaterials	Dr P Mouthuy Dr M Nair	W. 9 (wk 3) Th. 12, F. 9 (wk 7) T. 12 (wks 4-5,) T. 10 (wk 7) Th. 12, F.9 (wks 3-5)	LR8
Options Classes			
^{2,3} Materials & Devices for Optics & Optoelectronics	Class Lecturer		
Class 1	Dr. Gareth Jones	W. 2, Th. 2, F. 2 (wk 7)	ETBCR
Class 2	Dr. Gareth Jones	tbc (wk 2 HT)	tbc
Class 3	Dr. Gareth Jones	tbc (wk 3 HT)	tbc
² Physics and chemistry of crystalline interfaces	Class Lecturer		
Class 1	Prof K. Marquardt + Dr Tamsin Whitfield	M. 3, F. 4, Th. 3 (wk 7)	BRCR

Subject	Lecturer	Time	Place
Class 2	Prof K. Marquardt + Dr Tamsin Whitfield	W. 2, W. 4 Th. 2 (wk 8)	BRCR
Class 3	Prof K. Marquardt + Dr Tamsin Whitfield	tbc (wk 2 HT)	
^{2,3} Magnetic & Superconducting Materials	Class Lecturer		
Class 1	Dr P Zagura	T. 2, Th. 11, F. 2 (wk 8)	ETBCR
Class 2	Dr M. Slota	tbc (wk 2 HT)	
² Biomaterials	Class Lecturer		
Class 1	Dr P Mouthuy Dr M Nair	M. 3, T. 2, W. 2 (wk 7)	BRLT
Class 2	Dr P Mouthuy Dr M Nair	T. 10, Th. 4, F. 2 (wk 8)	BRLT
Class 3	Dr P Mouthuy Dr M Nair	tbc (wk 2 HT)	tbc
^{2,3} Microstructural Control in Engineering Alloys	Class Lecturer	TBC	
Class 1	Dr Akash Aggarwal.	F. 2 (wk 7) T. 10, Th. 4 (wk 8)	BRCR
Class 2	Prof. K.A.Q. O'Reilly & Dr E. Liotti	HT Week 2	tbc
Other Lectures			
Briefing for Characterisation/Modelling Courses	Prof A. Wilkinson & Prof J.R. Yates	W. 2.00 (wk 5)	HRLT
Introduction to Modelling in Materials	Prof J.R. Yates + Prof R. Drautz + Dr E Demir	M-F 9-5 (wk 6) Detailed schedule to be circulated in advance	am LR8/HRLT pm RR
Introduction to Team Design Project	Prof K. O. Reilly and Stella Job	M. 9.30-11 (wk 1)	LR8
TDP Workshop on Markets and Market Disruptors	S.P. Newbury	T. 2 (wk 1)	HRLT (Teams)
Team Design Project Presentations	2x Examiners	F. 1-6 (wk 3)	BRCR
External Part II Project Briefing	Prof. T.J.Marrow	M. 2.30 (wk 4)	BRLT
Industrial Visit	Prof. R.A House	Th. 1-6 (wk 5)	HRF
'Supercollection' Feedback GP1/2	Various	T. 2-4 (wk 4)	BRLT
'Supercollection' Feedback GP3/4	Various	W. 2-4 (wk 4)	BRLT
Summer Placements Briefing	Prof. H.E. Assender	M. 12 (wk 4)	HRLT

FOURTH YEAR			
Part II Induction Course	Prof. James Marrow & others	M. 9.30 – 1.30 (wk -3)	HRLT
Part II Project Management	Prof. James Marrow & others	Th. 1.30 – 5 (wk -3)	HRLT

Subject	Lecturer	Time	Place
Workshops on Ethics & Sustainability, in the context of Part II	Prof L. Brimacombe & Dr S. Job (coordinated by Mr S.P. Newbury)	F. 1.30 - 5 (<i>wk 5</i>)	HRLT
Workshop on Engineering/Scientific Context in respect of Part II Projects	Prof. R.C. Reed	M. 10 (<i>wk 6</i>)	HRLT
Careers and Networking Evening with Alumni (for Yr 3+ postgraduates, post-doctoral researchers, & Part II students)	Tbc	F. 4-6.30 (<i>wk 1</i>)	HB Café
The OU Careers Service – Active Job Hunting	Dr A. Evans	T. 1-2 (<i>wk 2</i>)	HRLT

POSTGRADUATES

Please also see the Researcher Training area on the MPLS website:

<https://www.mpls.ox.ac.uk/training/pgr/PGR>

Postgraduate training			
Induction course for Postgraduate students	Prof Angus Wilkinson & others	M. T. 9-5 (<i>wk 0</i>)	HRLT
Safety (Compulsory for all new research workers)	Daniel DeBrincat	T. 10 (<i>wk 1</i>)	HRLT
⁵ Hydrofluoric Acid Safety	tbc	tbc	Via Teams
⁵ Safe Handling of Compressed Gas Cylinders	tbc	tbc	Via Teams
OU Introduction to Laser Safety	University Safety Office & Dept of Physics	tbc	HRLT
The OU Careers Service – Active Job Hunting	Abbey Evans	T. 1-2 (<i>wk 2</i>)	HRLT
Introductory Meeting with Departmental Advisors	Dept Advisors	W. 11-11.30 (<i>wk 7</i>)	BRCR
The Institute of Materials – Benefits of Student Membership	Jaime Graham	F. 10 (<i>wk 6</i>)	HRLT
X-ray Diffractometry	Prof. S.C. Speller	<i>Recommended view time of online lectures</i> M. 10 (<i>wks 3-4</i>)	
Optical Microscopy	Prof. P.D. Nellist	M. 2.30-4.30 (<i>wk 4</i>)	HRLT
Teaching Skills: Tutoring Maths Classes	Prof. S.C. Benjamin	F. 2-5 (<i>wk 1</i>)	BRCR
Teaching Skills: Tutoring Materials Science	Dr. A. Kareer	W. 2-5 (<i>wk 4</i>)	ETBCR
Teaching Skills: Delivering a UG Lecture Course	Prof. T.J. Marrow	W. 2-5 (<i>wk 1</i>)	ETBCR
Teaching Skills: Junior Demonstrating in the Materials Teaching Lab	Prof. R.S.Bonilla & D, DeBrincat	F. 11.30-1 (<i>wk 6</i>)	ETBCR
Postgraduate lecture courses			

Subject	Lecturer	Time	Place
Foundation Topics for Electron Microscopy	Dr N.P. Young, Dr G.M. Hughes + Prof P.D. Nellist	T. 11 (wks 3-4) W. 11, Th. 2 (wks 3-5)	BRLT
Microscopy and Analysis of Surfaces	tbc	Online only	BRLT
Atomistic Modelling	Prof. J.R. Yates	<i>Recommended view time of online lectures</i> M. T. 9 (wks 3-7)	
		<i>Live Q&A workshops</i> Detailed schedule to follow	Via Teams
Research colloquia			
Materials Colloquia		Th. 3.30-5pm (wks 3,4,6,8)	HRLT
MML Seminar		T. 2pm (wks 2,4,6,8)	HRLT

¹Students who wish to attend the Supplementary Subject lectures should be aware that due to timetabling constraints, some of the lectures may overlap with core lectures.

²The lecture courses each have three hours of associated classes

³Y3 UG students attend one class in each week and need to register for a specific class via [Canvas](#)

UNDERGRADUATE TEACHING LAB PRACTICAL SCHEDULES FOR MICHAELMAS TERM 2025

Senior Demonstrators and their Deputies are reminded that they are required to be in the Department on the days their practicals are scheduled

MT Wk	YEAR 1 (Thur, Fri) [except Week1, when it is Tues-Fri]
1	1P1a, Intro to Computing (PJW , M.T. Ansari)
2	1P1b, Intro to Microscopy (KAQOR , SLP)
3 4	1P2, 1P2, Data Acquisition and Processing (RSB)
5 6	1P3, Young's Modulus (HEA/TJM)
7 8	1P4 Metallography (AJW , DEJA)

MT Wk	YEAR 2 (Mon, Tue, Wed)
1 2	2P1, Materials Selection (DEJA , SCS)
3 4	2P2, Steels (TJM , KM)
5 6	2P3, Extrusion (C Barker , MLG)
7 8	2P4, Casting (KAQOR , MLG)