

M. PHILS. (one-year courses), DIPLOMAS AND SPECIAL COURSES

MICHAELMAS 1999

LENT 2000

EASTER 2000

CHEMISTRY

Advanced courses (mainly for Research Students and others interested)

STAFF OF THE CHEMICAL LABORATORY
 Research Techniques in Organic Chemistry. W. 9
 (starting 13 Oct.)

STAFF OF IRC IN SUPERCONDUCTIVITY
 Classical and High Temperature
 Superconductivity. Th. 11 (Eight lectures)
IRC Seminar Room

A short course on Workshop practice is also offered to
 new Physical Chemistry graduate students early in
 the Michaelmas Term

EARTH SCIENCES

REGULAR SEMINARS

PROF. E. SALJE AND OTHERS
 Topics in Geological Sciences. Tu. 5 *Harker Room*

PROF. D. P. MCKENZIE AND OTHERS
 Colloquium in Geophysics. W. 4.30
Bullard Laboratories

PROF. H. E. HUPPERT AND OTHERS
 Seminars in Theoretical Geophysics. Th. 2
DAMTP Room A

PROF. N. J. SHACKLETON AND OTHERS
 Quaternary Discussion Group, Alternate F.
 F. 8.30 p.m. *Clare Hall*

The same continued

The same continued

The same continued
Earth Sciences, Harker II Room

The same continued

The same continued.

The same continued

GRADUATE COURSES

THE STAFF OF THE ELECTRON PROBE LABORATORIES
 Physical Techniques (by arrangement)

DR J. A. HUDSON [Math]
 Waves in Solid Media. M. W. F. 12

OTHER COURSES

PROF. D. P. MCKENZIE AND DR J. HAINES
 Physics of the Earth as a Planet. Tu. Th. S. 10
Cavendish Laboratory

STAFF OF THE IRC IN SUPERCONDUCTIVITY
 Classical and High Temperature
 Superconductivity. Th. 11 (Eight lectures)
IRC Seminar Room

DR J. A. MILLER
 Field Course in Geophysics¹

¹ Graduates wishing to take the Field Course should write to Dr Miller at the Bullard Laboratories early in October 1999. It may be necessary to limit numbers.

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HISTORY AND PHILOSOPHY OF SCIENCE*Classes and Seminars for Research Students in History and Philosophy of Science*

Unless otherwise stated all classes and seminars will be given in the *History and Philosophy of Science Seminar Rooms, Free School Lane*. Prof. P. Lipton and Dr J. Forrester will meet all postgraduate students at 10 a.m. on Tuesday 5 October in *Seminar Room 2* to discuss the course and arrange supervision. Course details, dates and times are as follows.

THE TEACHING OFFICERS M.Phil. Seminar in History and Philosophy of Science and Medicine. Tu. 2	The same continued	The same continued
THE TEACHING OFFICERS AND INVITED SPEAKERS Departmental Seminar in History and Philosophy of Science. Th. 4.30	The same continued	The same continued
DR J. FORRESTER, DR M. KUSCH, DR D. THOM AND INVITED SPEAKERS Psy Studies (Cambridge Group for the History of Psychiatry, Psychology, Psychoanalysis and Allied Sciences) W. 5 (fortnightly, from 13 Oct.)	The same continued	The same continued
DR S. KUSUKAWA AND INVITED SPEAKERS Early Medicine and Natural Philosophy. Tu. 5 (fortnightly, from 19 Oct.)	The same continued	
DR N. HOPWOOD AND INVITED SPEAKERS History of Modern Medicine and Biomedical Sciences Seminar. Tu. 5 (fortnightly, from 12 Oct.)	The same continued	
PROF. N. JARDINE, DR A. CUNNINGHAM AND INVITED SPEAKERS Cabinet of Natural History (Cambridge Group for the History of Natural History and Environmental Sciences) M. 1	The same continued	The same continued
PROF. N. JARDINE, DR M. FRASCA SPADA AND OTHERS Cambridge Historiography Group. W. 5.30 (fortnightly, from 20 Oct.) Research Methods and Resources. Th. 4 (7, 14 Oct)	The same continued	The same continued
DR A. BARRY Technology and Material Culture. M. 8 p.m. (fortnightly, from 18 Oct.)	The same continued	The same continued
PROF. P. LIPTON AND OTHERS Epistemology Reading Group. Th. 2	The same continued	The same continued
DR S. KUSUKAWA AND DR J. MARENBO Medieval Sciences Reading Group. Tu. 1 <i>LI, Great Court, Trinity</i>	The same continued	The same continued
MR G. RADICK AND OTHERS Evolution Reading Group. M. 8 p.m. (fortnightly, from 11 Oct.)	The same continued	The same continued
DR K. RIDDERBOS Sigma Club. F. 2 (fortnightly, from 19 Oct.)	The same continued	The same continued

MATERIALS SCIENCE AND METALLURGY**COURSES FOR GRADUATES**

Course Co-ordinator: Dr R. E. M. Ward E-mail: remw2@msm.cam.ac.uk

Lectures will be given in the Department of Materials Science and Metallurgy

A detailed timetable is available in the Department.

STAFF OF THE DEPARTMENT Techniques of Materials Research. M. Tu. W. Th. F. 2, 3 (Twenty-two lectures, beginning 7 Oct.)	DR C. B. BOOTHROYD Microprobe Analysis. M. W. F. 2 (Eight lectures, beginning 28 Jan.)
DR J. A. LITTLE Scanning Electron Microscopy M. W. F. 2 (Eight lectures, beginning 25 Oct.)	DR J. A. LEAKE AND DR R. E. CAMERON X-ray and Neutron Diffraction Methods. Tu. Th. 2 (18 Jan.–1 Feb.); F. 2 (14 Jan.) (Six lectures)
DR W. O. SAXTON Image Processing in Materials Science. Tu. Th. 2 (Four lectures, beginning 26 Oct.)	PROF. C. J. HUMPHREYS Advanced Transmission Electron Microscopy. Tu. Th. 2 (Six lectures, beginning 8 Feb.)
PROF. D. J. FRAY AND DR R. V. KUMAR Experimental Techniques in Chemical Metallurgy. Tu. Th. 2 (Eight lectures, beginning 9 Nov.)	DR P. A. MIDDLEY Introduction to Transmission Electron Microscopy. Details to be announced (Eight lectures)
DR Z. H. BARBER Film Deposition and Microfabrication Techniques. M. W. F. 2 (12–19, 24, 29 Nov.); (Six lectures)	The same continued

REGULAR SEMINARS

DR A. L. GREER AND OTHERS Materials Science and Metallurgy. M. 4.15	The same continued
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M. PHILS. (one-year courses), DIPLOMAS AND SPECIAL COURSES (continued)

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EASTER 2000

MICROELECTRONIC ENGINEERING AND SEMICONDUCTOR PHYSICS

Lectures are given either in the *Microelectronics Seminar Room, Cavendish Laboratory*, or at the *Department of Engineering*

DR J. R. A. CLEAVER Semiconductor device physics (Ten lectures)	PROF. H. AHMED ULSI and silicon nanoelectronics (Six lectures)
DR M. E. WELLAND Physics of semiconductors (Six lectures)	DR C. G. SMITH Quantum transport in semiconductor device physics (Four lectures)
DR D. G. HASKO Semiconductor processing (Six lectures)	DR R. J. MEARS Optoelectronics (Six lectures)
DR J. R. A. CLEAVER Lithography (Six lectures)	PROF. W. I. MILNE Amorphous Semiconductors and their applications (Four lectures)
DR M. E. WELLAND Materials analysis for semiconductor devices (Three lectures)	DR P. MIGLIORATO Large-area devices and displays (Four lectures)
DR F. UDREA Power microelectronics (Four lectures)	DR C. R. LOWE Bioelectronics (Four lectures)
DR D. M. HOLBURN Devices, circuits and modelling (Five lectures)	

A detailed teaching programme, with information about the laboratory courses, may be obtained from Dr J. R. A. Cleaver at the *Department of Physics*.

PHYSICS**COURSES FOR GRADUATES**

Courses recommended for Research Students in Solid State Physics

Lectures are given in one of the *Seminar Rooms, Mott Building*, unless otherwise stated.

THE STAFF OF THE MOTT BUILDING Solid State Physics. M. W. F. 9	The same continued	
DR A. L. BLELOCH AND OTHERS Principles of Electron Microscopy and Diffraction. Tu. Th. 12 (additional practicals at times to be arranged)	The same continued	The same continued
PROF. D. E. KHMELNITSKII Condensed Matter Theory. Tu. Th. 10 (Sixteen lectures)	Path Integrals. Tu. Th. 10 (Sixteen lectures)	
Special Topics in Theoretical Physics. F. 10 (Eight lectures)		
DR Y. MAO, DR T. M. FINK AND PROF. S. E. EDWARDS Aspects of Statistical Mechanics. M. W. 10 (Sixteen lectures)	DR M. J. RUTTER Computer Architecture. M. W. 10 (Four lectures, beginning 19 Jan.)	
	DR R. J. NEEDS AND DR G. RAJAGOPAL Electronic Structure. M. W. 10 (Six lectures, beginning 2 Feb.)	
	DR B. D. SIMONS Field Theory in Condensed Matter Physics. M. W. 10 (Six lectures, beginning 23 Feb.)	
DR A. CAMPBELL AND THE STAFF OF THE RESEARCH CENTRE IN SUPERCONDUCTIVITY Classical and High Temperature Superconductivity. Th. 9. 15 (Eight lectures) <i>IRC Seminar Room</i>		DR I. HOPKINSON AND OTHERS Graduate lectures in Polymers and Colloids. M. 2-4 <i>P and C Seminar Room</i>

Courses recommended for Research Students in Radio Astronomy

See Graduate Lectures in Astronomy and Astrophysics (p. 228)

Courses recommended for Research Students in High Energy Physics

DR J. R. CARTER AND OTHERS Selected Topics in Elementary Particle Physics. Tu. Th. 9.30	The same continued	The same continued
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M. PHILS. (one-year courses), DIPLOMAS AND SPECIAL COURSES (continued)

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LENT 2000

EASTER 2000

PHYSICS (continued)**REGULAR SEMINARS***All seminars continued in the Lent and Easter Terms***Principal Seminars**

PROF. R. E. HILLS AND OTHERS

Astrophysics. Tu. 4.30

DR J. R. CARTER AND OTHERS

High Energy Physics. Th. 3

DR J. A. C. BLAND AND OTHERS

Condensed Matter Physics. W. 4.30

Research Group Seminars

DR S. R. JULIAN AND OTHERS

Low Temperature Physics. W. 11.15

PROF. M. PEPPER AND OTHERS

Semiconductor Physics. M. 2.15

PROF. L. M. BROWN AND OTHERS

MP/PCS Seminars in Microstructural Physics. W. 2.30

PROF. J. E. FIELD AND OTHERS

PCS (Materials). Th. 4.30

PROF. A. M. DONALD AND OTHERS

Polymer and Colloid Physics. F. 2.15

PROF. R. H. FRIEND AND OTHERS

Molecular and Opto-Electronics. Tu. 2.15

DR D. A. CARDWELL AND OTHERS

Superconductivity. Th. 11

PROF. P. LITTLEWOOD AND OTHERS

Theory of Condensed Matter. Th. 2.15