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UNIVERSITY OF  
CAMBRIDGE

## NOTICES

### Calendar

- 19 December, *Monday*. Michaelmas Term ends.  
 5 January, *Thursday*. Lent Term begins.  
 11 January, *Wednesday*. First ordinary number of the *Reporter* in the Lent Term.  
 17 January, *Tuesday*. Full Term begins.  
 21 January, *Saturday*. Congregation of the Regent House at 2 p.m.  
 24 January, *Tuesday*. Discussion at 2 p.m. in the Senate-House (see below). End of first quarter of Lent Term.

### Notice of a Discussion on Tuesday, 24 January 2012

The Vice-Chancellor invites those qualified under the regulations for Discussions (*Statutes and Ordinances*, p. 107) to attend a Discussion in the Senate-House, on Tuesday, 24 January, at 2 p.m., for the discussion of:

1. Annual Report of the Council for the academical year 2010–11, dated 21 November 2011 (*Reporter*, 2011–12, p. 216).
2. Annual Report of the General Board to the Council for the academical year 2010–11, dated 2 November 2011 (*Reporter*, 2011–12, p. 222).
3. Reports and Financial Statements for the year ended 31 July 2011 (*Reporter*, 2011–12, p. 227).
4. Joint Report of the Council and the General Board, dated 28 November 2011 and 2 November 2011, on the provision of sites and buildings regulations (*Reporter*, 2011–12, p. 269).
5. Joint Report of the Council and the General Board, dated 12 December 2011 and 30 November 2011, on a retirement policy for University staff (*Reporter*, 2011–12, p. 347).
6. Report of the Faculty Board of Clinical Medicine, dated 28 November 2011, on the M.D. Degree (*Reporter*, 2011–12, p. 314).

### Board of Scrutiny: Sixteenth Report (2010–11): Notice

*12 December 2011*

This Notice is the Council's reply to the Board of Scrutiny's Sixteenth Report (*Reporter*, 2010–11, p. 1061) and the Discussion of it held on 11 October 2011 (*Reporter*, 2011–12, p. 78).

The Council believes that the University should be grateful to the Board for its constructive and thoughtful Report, and indeed for its thorough work during the year.

The Council comments below on the specific recommendations of the Board's Report:

- 1. The Board recommends that the performance results for the Cambridge University Endowment Fund (CUEF) should be made more widely available throughout the University. In particular, the annual summary performance report that is distributed to investors in the Endowment Fund should be published in the *Reporter*.**

The University is constrained in the extent it can promote the CUEF under its regulation by the Financial Services Authority. Annual and quarterly performance summaries are provided to entities related to the University which are investors and to the managers of internal funds investing in the CUEF. An annual investors meeting is held and performance and asset allocation information is published in the University's Financial Statements (with commentary in the Financial Review) and in the Financial Management Information *Reporter*.

- 2. The Board recommends that the Council routinely include a section on underlying assumptions, including inflation, pay awards and all other critical inputs in all future Budget Reports.**

The guidance that precedes each annual planning round is available at <http://www.admin.cam.ac.uk/cam-only/offices/planning/planround/round/> and gives indicators for pay and non-pay cost inflation. These will, in future, be included in the Budget Report.

- 3. The Board recommends that all inflation planning assumptions, together with all other relevant planning inputs be set at realistic levels, consistent with long-term UK averages for the HE sector.**

The Council believes that planning assumptions are realistic, but that contemporary circumstances and not long-term averages are the best guide if forecasts are not to be mere trends.

A range of indicators are reviewed before the guidance is issued. Estimates of pay costs take account of volume change and other factors such as incremental drift as well as possible future pay awards. Realism and caution are essential. The Council is concerned to ensure that unrealistic assumptions do not lead to unrealistic expectations. The Board is reminded that the forecasts are reviewed annually to maintain a rolling five-year view.

4. **The Board recommends that the Council outlines the University's strategy for ensuring that research income meets projected targets.**
8. **The Board recommends that the Council outlines the University's response to the trend towards funding larger grants linked to strategic themes rather than individual research.**

Overall, the University's research income grew by 7.5% in 2010–11 compared with 2009–10. Notwithstanding this, the University remains acutely conscious of the potential problems arising from sponsors having very different arrangements for paying indirect overheads. For example, the Research Councils pay 80% of Full Economic Costing; with the charities the University receives partnership QR in the HEFCE block grant but no overheads; the EU pays a flat 20% of the overall cost while contributions from industry depend on individual negotiation. Meanwhile, in the present difficult economic climate, it is not surprising to learn that sponsors are trying to obtain the same amount of research, or more, for less outlay. The University needs to manage a balanced portfolio of research funding since any significant move away from the present level of Research Councils' support would seriously compromise our ability to recover the full contribution towards centrally-incurred costs.

The General Board and the Research Policy Committee (RPC) have already taken steps to enhance the University's grant-winning capabilities. Researchers are being encouraged to win more and bigger grants through the RPC's formal programme of Strategic Research Initiatives and Networks. These will provide a framework on which the University can build major funding bids, which demonstrate clear academic leadership and goals, broad support from the academic community and a substantial potential to attract new partnerships and research funding. The RPC are providing modest sums for a period of three years as pump priming for these areas of activity, the first four of which were awarded University Strategic Initiative status in 2010 (Neuroscience, Infectious Diseases, Stem Cells, and Conservation) with a further three in 2011 (Language Sciences, Cancer, and Energy). The University's commitment to this scheme now stands at around £1.5m over a three-year period.

Concurrently, the University is improving its internal structures to achieve a better return on overheads. A more cohesive approach to costing and pricing has been introduced across the University Research Office and with particular attention being paid to strengthening procedures for scrutinizing large grant applications and to reclaiming more in eligible costs on EU grants. Meanwhile the Pro-Vice-Chancellor (Planning and Resources) is leading a project to improve the incentive structure for Departments and individual Principal Investigators while the RPC, recognizing the need for enhanced and comparative management information, has set up a Working Party to be led by the Director of the Management Information Services Division (MISD).

As the Board points out, there is a growing demand for larger, internationally excellent research teams within research calls. The claimed advantage of these substantially higher value grants is that they bring greater efficiencies while incurring lower indirect costs. But the University remains fully committed to the valuable and diverse research arising from single investigator research. The RPC has demonstrated this commitment by providing funding to support two research facilitators in the Schools of Arts and Humanities and the Humanities and Social Sciences. In addition, dedicated funding has been allocated to these same two Schools to compensate for the loss of the British Academy and ESRC small grants schemes and also to protect Ph.D. studentship funding.

5. **The Board recommends that the Council reconsider the manner in which strategic thinking in financial planning is provided.**

The Finance Committee has three external members who provide a valuable external perspective and specialist skills, including banking experience. A further external member, again with extensive banking experience, has been co-opted by the Committee from October 2011.

The Finance Committee set up a Financial Strategy Task Force, under the chairmanship of Ms Sherry Coutu, an external member of Council, which met over 2009–10. The group reviewed the financial approaches of the University's international competitors and engaged specialist consultancy advice. Its detailed work was subsequently taken on by the Financial Strategy Steering Committee of the Finance Committee.

6. **The Board recommends that steps be taken to reopen the Combination Room or at the very least report to the Regent House on future plans for this important asset.**

The Council notes that the Combination Room has been open to current and retired members of the Regent House and visiting academics since 3 October (*Reporter*, 2011–12, p. 3). It was also open to all members of the Senate and their families and guests during the Chancellorship election.

7. **The Board recommends that the process of streamlining the contents of the *Reporter* and moving control of the material away from the centre to the Faculties is very carefully monitored.**

The Council notes this comment. The Registry will review the success of this initiative at the end of the academical year.

9. **The Board recommends that the Council provides an account of how the University will seek to maintain flexibility and competitiveness in recruiting from overseas in the light of UKBA restrictions.**

In its Annual Report for 2010–11 the Council commented on its increasing concerns about the Home Office's new and restrictive rules on immigration and the implications for the University's capacity to recruit the brightest and best international academics and students. The University is making strenuous efforts to influence the development of the policy, through representations to Ministers, other politicians and senior Civil Servants as well as through consultation exercises when changes are proposed. The Council is also grateful for the work of Lord Wilson of Dinton (the Master of Emmanuel College) and Dr G. A. Reid, Head of the Intercollegiate Services Office, on addressing critical issues for the Colleges in this regard with determination and success. Some concessions have been made, for example the introduction

of Tier 1 (exceptional talent) but, as should be apparent from recent events, immigration has a high profile politically which is not conducive to achieving further concessions in the short term. The Human Resources Committee is monitoring the situation closely and will consider whether central support for this area will need strengthening.

An internal review is currently being conducted to assess the level of support given to individuals submitting visa applications. It is likely that this level of support will be increased to reduce the risk of error and the consequential negative impact on the individual and the University. This could include support for an application for a visa alongside other welfare arrangements associated with moving to Cambridge, although it is important to note that the responsibility for the application remains with the individual.

**10. The Board recommends that a comprehensive review of the University's international activities be undertaken, that an international strategy be clearly articulated, and that the necessary resources be allocated, and their effectiveness monitored on a regular basis, to facilitate implementation of this strategy.**

The Council agrees that a clearly articulated international strategy for the University is essential and, together with the General Board, has taken steps to improve the support provided by the central administration. During the current year the International Office has been reorganized as the International Strategy Office (with a revised remit). Dr Toby Wilkinson was appointed as Head of the Office from 1 July 2011. In October this year the General Board approved a protocol for international agreements, to ensure best practice, better co-ordination, and support of international partnership agreements across Schools, Faculties, and Departments (<http://www.admin.cam.ac.uk/offices/international/protocol.pdf>) – the Head of the International Strategy Office will be making presentations of the protocol to the Councils of the Schools during the Michaelmas Term 2011 and Lent Term 2012. An International Strategy Committee, chaired by the Pro-Vice-Chancellor for International Strategy, has been established with effect from January 2012.

In September this year a consultancy project was launched to advise on concrete steps to strengthen the University's strategic engagement with the EU; this is due to report by mid-December 2011. There has been major progress towards the delivery of draft country/regional strategies for India, China, and the EU by January 2012, and major progress towards the delivery of a draft overarching international strategy to the General Board in May 2012.

*Discussion on 11 October 2011*

The Council notes Mr Maclarens comments about the North West Cambridge project. A Notice giving information about the current status of the project was published on 26 October (*Reporter*, 2011–12, p. 82). As stated in that Notice, further information will be provided to the University in 2012.

Professor Evans's comments on Statute U and the senior academic promotions procedure have been forwarded to the Human Resources Committee and the Technical Review Group on the Statutes and Ordinances.

## VACANCIES, APPOINTMENTS, ETC.

### Vacancies in the University

A full list of current vacancies can be found at <http://www.admin.cam.ac.uk/offices/hr/jobs/>.

**Laing O'Rourke University Lectureship in Construction Engineering in the Department of Engineering;** salary: £36,862–£46,696 a year; closing date: 31 January 2012; further particulars: <http://www.eng.cam.ac.uk/admin/jobsinfo/LoR>; quote reference: NA10972

**University Lectureship in the Performance-based Design of Structures in the Department of Engineering;** salary: £36,862–£46,696 a year; closing date: 31 January 2012; further particulars: <http://www.eng.cam.ac.uk/admin/jobsinfo/PBD>; quote reference: NA10972

**Postdoctoral Research Fellowship in Statistics in the Department of Pure Mathematics and Mathematical Statistics;** salary: £27,428–£35,788 a year; limit of tenure: three years; closing date: 15 January 2012; further particulars: <http://www.jobs.cam.ac.uk/job/-10722/>; quote reference: LF10722

Any job application submitted with a *curriculum vitae* should be accompanied by a Cover Sheet for Employment (form CHRIS/6) which can be downloaded from <http://www.admin.cam.ac.uk/offices/hr/forms/chris6/>, or may be obtained in hard copy from the advertising Department or Faculty.

*The University values diversity and is committed to equality of opportunity.*

*The University has a responsibility to ensure that all employees are eligible to live and work in the UK.*

## Appointments, reappointments, and grants of title

The following appointments, reappointments, and grants of title have been made.

### APPOINTMENTS

#### **University Senior Lecturer**

*Public Health and Primary Care.* Dr Pablo Monsivais, B.A., *Texas*, Ph.D., M.P.H., *Washington*, appointed from 1 September 2011 until the retiring age and subject to a probationary period of five years.

#### **University Lecturers**

*Archaeology and Anthropology.* Dr Peter Daniel Walsh, B.A., *Middlebury, Vermont*, M.Sc., M.Phil., Ph.D., *Yale*, appointed from 1 October 2011 until the retiring age and subject to a probationary period of five years.

*Economics.* Dr Edoardo Gallo, B.A., *Harvard*, M.Phil., D.Phil., *Oxford*, appointed from 13 February 2012 until the retiring age and subject to a probationary period of five years.

*Geography.* Dr Alexander Sam Jeffrey, M.A., *Edinburgh*, M.A., Ph.D., *Durham*, appointed from 1 April 2012 until the retiring age and subject to a probationary period of three years. Dr Kendra Strauss, B.A., *McGill*, M.Sc., D.Phil., *Oxford*, appointed from 1 April 2012 until the retiring age and subject to a probationary period of five years.

*Judge Business School.* Ms Kan Jenny Chu, B.A., *Michigan*, M.A., Ph.D., *Berkeley*, appointed from 1 September 2011 until the retiring age and subject to a probationary period of five years.

*Medicine.* Dr Kenneth Eric Sealy Poole, Ph.D., *CL, M.B., Southampton*, MRCP, appointed from 29 July 2011 until the retiring age and subject to a probationary period of five years.

*Physiology, Development, and Neuroscience.* Dr Kristian Franze, V.M.D., Ph.D., *Leipzig*, appointed from 1 October 2011 until the retiring age and subject to a probationary period of five years.

#### **Associate Lecturers**

*Clinical Medicine.* Dr Gladstone Austin Amos Burke, M.B., Ch.B., *Edinburgh*, Ph.D., *Bristol*, FRCP, FRCPCH, Dr Dean Fear, M.B., Ch.B., *Otago, Dunedin*, FRCA, Dr Richard Iles, M.B., B.S., *London*, MBMA, MRCP, MRCPCH, Dr Clive Jonathan Lewis, M.A., M.B., B.Chir., Ph.D., *JE*, MRCP, Dr Sarah Morley, B.Sc., M.B., B.S., Ph.D., *London*, MRCP, FRCPCH, Dr Lincoln Alexander Sargeant, M.Phil., Ph.D., M.St., *W, M.B., B.S., D.M., West Indies*, MFPH, and Dr Alain Vuylsteke, B.Sc., *Facultés Notre Dame de la Paix, Belgium*, M.D., *Catholique Université de Louvain, Brussels*, FRCA, FFICM, appointed from 1 September 2011 for five years.

#### **Clinical Lecturers**

*Medicine.* Dr Elizabeth Louise Bird-Lieberman, M.A., M.B., B.Chir., Ph.D., *N*, MRCP, appointed from 31 October 2011 to 30 October 2015 and subject to a probationary period of twelve months.

*Psychiatry.* Dr Rudolf Nicholas Cardinal, M.A., M.B., B.Chir., Ph.D., M.D., *JN*, MRCP, MRCPsych, appointed from 18 September 2011 to 17 September 2015 and subject to a probationary period of twelve months.

*Surgery.* Mr Vasileios Kosmoliaptis, Ph.D., *W, M.D., Ioannina, Greece*, appointed from 5 October 2011 to 4 October 2015 and subject to a probationary period of twelve months.

#### **Acting Head of Department**

*Centre for Advanced Religious and Theological Studies.* Dr Michael Higton appointed from 17 January 2012 to 23 April 2012.

#### **Deputy Heads of Department**

*Engineering (Teaching).* Dr Simon Guest, *TH*, appointed from 1 April 2012 to 31 March 2015.

*Pathology.* Professor Nabeel Ahmed Affara appointed from 1 October 2011 to 30 September 2014.

#### **Principal Assistant Registry**

*University Offices (Estate Management).* Mrs Sarah Louise Foreman, B.Sc., *Westminster*, appointed from 4 January 2012 until the retiring age and subject to a probationary period of nine months.

#### **Departmental Secretary**

*Office of the School of the Physical Sciences.* Dr Laurie Elizabeth Friday, B.A., *N, Ph.D., Exeter*, appointed from 13 October 2011 until the retiring age and subject to a probationary period of nine months.

#### **Administrative Officers**

*University Offices (Estate Management).* Mr Andrew Duncan Gillies, appointed from 21 November 2011 until the retiring age and subject to a probationary period of nine months.

*University Offices (Finance Division).* Mr James Whybrow, appointed from 28 November 2011 until the retiring age and subject to a probationary period of nine months. Mr Ben Alban Perks, appointed from 5 December 2011 until the retiring age and subject to a probationary period of nine months. Mrs Elizabeta Gockova Moss, B.A., *Belgrade*, appointed from 23 December 2011 until the retiring age and subject to a probationary period of nine months.

*University Offices (External Affairs and Communications).* Ms Susan Theresa Long, B.A., *LC*, appointed from 1 June 2011 until the retiring age. Ms Tracey Bernadette Shiels, B.A., *LC*, appointed from 1 October 2011 until the retiring age.

#### **Computer Officer**

*University Offices (Management Information Services Division).* Mrs Sharon Georgina Mott appointed from 1 December 2011 until the retiring age and subject to a probationary period of nine months.

#### REAPPOINTMENTS

##### **Deputy Head of Department**

*Zoology.* Dr William Andrew Foster, *CL*, reappointed from 1 January 2012 to 31 December 2014.

#### GRANTS OF TITLE

##### **Affiliated Lecturers**

*Clinical Medicine.* Dr Kenneth Kian Leong Ong, *JN*, has been granted the title of Affiliated Lecturer from 1 April 2011 for a further two years.

*Psychiatry.* Dr Shahid Hassan Zaman, *CHU*, has been granted the title of Affiliated Lecturer from 1 November 2011 for two years.

#### **REGULATIONS FOR EXAMINATIONS**

The General Board give notice that, on the recommendation of the Faculty Board or other authority concerned, the regulations for certain University examinations have been amended as follows:

#### **M.B., B.Chir. Degrees (New Curriculum Regulations)**

(*Statutes and Ordinances*, p. 455)

##### **With effect from 1 October 2011**

Changes to the regulations to reflect current assessment procedures and to remove unnecessary details for the form of papers have been made.

##### Regulation 3(f).

The approved courses in Part III of the Final M.B. Examination have been amended so as to remove reference to 'Therapeutics' and 'Ethics and Law' and to include 'Pathology' and 'Psychiatry'. The list reads:

*for Part III* Medicine and Surgery with Clinical Pharmacology, Pathology, Psychiatry, General Practice, Public Health Medicine, Paediatrics, Obstetrics and Gynaecology, and other medical and surgical specialities covered in the curriculum.

##### Regulation 15.

The specified duration of the written papers in Parts I and III has been removed from the regulation. For Part I the words 'one of two hours and one of two hours and twenty minutes,' have been removed. For Part III the words ', two of three hours and one of two hours,' have been removed.

##### Regulation 19(a).

The regulation has been amended by adding after the words 'shall be taken concurrently' the words 'except by permission of the Faculty Board in exceptional circumstances'.

##### Regulation 23(b).

The word 'component' in line 5 has been replaced by the word 'specialty'.

##### Regulation 25.

The words 'or component' have been deleted from subsection (b); and subsection (c) has been deleted.

**Regulation 26.**

The final sentence has been amended to remove reference to Part II of the Final M.B. Examination so as to read:

On the occasion of a candidate's first attempt at Part I or Part III of the Final M.B. Examination, but not on any subsequent occasion, special merit may be recognized by the award of a mark of distinction.

**Temporary Regulations**

Regulation 28 has been deleted; Temporary Regulation 29 has been renumbered as 28.

**SUPPLEMENTARY REGULATIONS**

(*Statutes and Ordinances*, p. 461)

The detail for Part III of the Final M.B. Examination has been deleted.

**NOTICES BY FACULTY BOARDS, ETC.****Natural Sciences Tripos, Part III (Experimental and Theoretical Physics) and Master of Advanced Studies in Physics, 2011–12: Notice**

The Head of the Department of Physics gives notice that the following amendment is required to the list of further work available for examination in 2012 previously published (*Reporter*, 2011–12, p. 108).

*Minor Topics*

The examination paper 'Nuclear materials' from Part III Materials Science will be a 1.5 hour paper examined late in the Easter Term.

**FORM AND CONDUCT OF EXAMINATIONS, 2011–12**

Notices by Faculty Boards, or other bodies concerned, of changes to the form and conduct of certain examinations to be held in 2011–12, by comparison with those examinations in 2011, are published below. Complete details of the form and conduct of all examinations are available from the Faculties or Departments concerned.

**Asian and Middle Eastern Studies Tripos, Parts IB and II, 2012**

The Faculty Board of Asian and Middle Eastern Studies give notice that with effect from the examinations to be held in 2012 the form of the examination for the following papers of the Asian and Middle Eastern Studies Tripos will be as specified below:

**PART IB***MES.13. Intermediate Hebrew*

This paper will be divided into two sections, at least one of which must be answered. Section A (Classical Hebrew) will contain four questions on Hebrew language (15 marks each) and two questions on specified texts (20 marks each). Section B (Modern Hebrew) will contain three questions on Hebrew language (15 marks each), two questions on specified texts (15 marks each), and an oral (25 marks). Candidates offering one section only must answer all questions. Candidates studying both Classical Hebrew and Modern Hebrew must offer two language questions (15 marks each) and one specified text question (20 marks) from Section A and one language question (15 marks), one specified text question (15 marks), and oral (20 marks) from Section B.

The oral will consist of (1) translation and interpretation test (5 marks); (2) listening comprehension test (5 marks); (3) general oral ability test (15 marks; 10 marks for candidates offering both Classical and Modern Hebrew).

**PART II***C.11. Modern Chinese translation and writing 3*

The paper requires candidates to translate two English texts into Chinese and to write an essay in Chinese on a specified topic. Candidates should attempt all questions.

*C.12. Modern Chinese texts 3*

The paper requires candidates to translate all three Chinese texts into English. The first will be a text from a Chinese newspaper, the second will be a literary text, and the third will be a non-fiction text. Candidates will be allowed to use the Chinese–Chinese dictionaries provided.

*C.13. Literary Chinese 3*

The paper will contain passages from seen texts and unseen material for translation. Specified texts and subjects will include selections from historical narrative prose and selections from Tang verse. Candidates will be allowed to use copies of the Chinese–Chinese dictionaries provided.

*C.14. Advanced Chinese texts*

This paper consists of a number of discrete sections linked to whatever special paper the student has chosen. Each section will consist of three unspecified Chinese texts for translation into English.

*C.16. Early and imperial China*

This paper will consist of ten essay questions of which candidates will be required to answer three.

*C.17. Modern Chinese literature*

This paper will consist of ten essay questions of which candidates will be required to answer three.

*C.18. China and warfare*

This paper consists of ten questions of which candidates will be required to answer three.

*C.20. Contemporary Chinese society*

This paper consists of ten essay questions of which candidates will be required to answer three.

*Chinese oral*

The examination consists of a listening comprehension test and an oral test. All oral tests will be recorded.

## (a) Listening comprehension test

Candidates will be asked to answer multiple-choice questions in Chinese related to recorded passages in Chinese (40 marks – 30–40 minutes).

## (b) Oral test

The candidate will first be asked to provide an oral précis of her or his dissertation and answer questions about it. Then he or she will be asked to discuss a selected topic with the examiners. Finally, there will be a test on English–Chinese interpretation. The selected topics will be posted in the Faculty one working day before the examination (60 marks – 15 minutes).

*J.11. Modern Japanese 3*

The paper will consist of three questions: (1) a short passage for translation from English into Japanese; (2) a Japanese text to be summarized in Japanese; (3) a short composition in Japanese. Candidates will be required to attempt all three questions.

*J.12. Modern Japanese texts 3*

The paper will consist of two sections. Section A consists of two unseen passages for translation from Japanese into English, of which students should translate one.

Section B consists of three seen passages for translation from Japanese to English, of which students should translate two. Students must answer both sections.

*J.13. Advanced Japanese texts*

This paper consists of a number of discrete sections linked to whatever special paper the student has chosen. Each section will consist of three unspecified Japanese texts for translation into English.

*J.16. Tokugawa Japan*

The course-work that constitutes this paper assessment consists of one research essay, of between 6,000 and 7,500 words, including footnotes and excluding bibliography. Each student will develop the topic of the essay in consultation with the instructor. A one-page topic and paper outline plus a bibliography will be due during the first class session of Lent Term. Two copies of the project shall be submitted to the Programmes Administrator in the Faculty Office so as to arrive not later than the division of full Easter Term.

*J.17. Modern Japanese history*

The course-work that constitutes this paper assessment consists of one research essay, of between 6,000 and 7,500 words, including footnotes and excluding bibliography. Each student will develop the topic of the essay in consultation with the instructor. A one-page topic and paper outline plus a bibliography will be due during the first class session of Lent Term. Two copies of the project shall be submitted to the Programmes Administrator in the Faculty Office so as to arrive not later than the division of full Easter Term.

*J.19. Contemporary Japanese society*

The course-work that constitutes this paper assessment consists of one research essay, of between 6,000 and 7,500 words, including footnotes and excluding bibliography. Each student will develop the topic of the essay in consultation with the instructor. A one-page topic and paper outline plus a bibliography will be due during the first class session of Lent Term. Two copies of the project shall be submitted to the Programmes Administrator in the Faculty Office so as to arrive not later than the division of Easter Term.

*EAS.2. The East Asian region*

Undergraduate students can elect to be assessed EITHER by a three-hour written examination consisting of 12 questions of which students must answer three, OR by submitting a research essay of between 6,000 and 7,500 words, including footnotes and excluding bibliography. In the latter case, each student will develop the topic of the essay in consultation with the instructor. A one-page topic and paper outline plus a bibliography will be due during the first class session of Lent Term. Two copies of the project shall be submitted to the Programmes Administrator in the Faculty Office to arrive not later than 31 May 2012 (and *not*, as previously advised, the division of Easter Term). Students are required, by the division of the Michaelmas Term, to inform the instructor of their preferred choice of assessment – either the examination or the extended research essay. Once this choice has been specified, it cannot be changed.

*K.1. Readings in elementary Korean*

This paper will consist of three sections. In Section A students will be tested on their knowledge of Korean grammar. In Section B students will be required to translate extracts from seen texts into English. In Section C students will be required to translate extracts from unseen texts into English.

*Japanese oral*

The oral examination consists of three parts of equal mark-value, and all oral tests will be recorded.

- (a) Listening comprehension: Candidates listen to a recorded passage of Japanese and answer questions in English.
- (b) Oral précis: Candidates prepare a passage in English with the aid of dictionaries. They then summarize the content in Japanese before the examiners. A short conversation in Japanese on the topic may follow.
- (c) Speech: Candidates are asked to submit the title of a speech a week before the examination. The speech itself should last no more than ten minutes; notes are allowed but the speech must not be read aloud. A short conversation will follow.

*MES.31. Advanced Arabic*

The examination consists of two parts, a three-hour written examination (70 marks) and an oral examination, which is taken at the beginning of the fourth year (30 marks). The written examination consists of three questions: one passage of Arabic on which candidates will be required to answer questions (25 marks); one passage of Arabic to be summarized in English (15 marks); and one question offering a choice of at least four topics for an essay in Arabic of at least 350 words (30 marks). All questions must be attempted.

The oral examination consists of four sections. All timings are approximate and all oral examinations are recorded.

- (a) Listening comprehension. Candidates answer questions on one recorded passage, which may be taken from a variety of sources (8 marks – 30 minutes).
  - (b) Reading aloud. Candidates are required to read aloud an unseen passage with full vocalization. No time is made available for preparation beforehand (3 marks).
  - (c) Liaison interpreting. Candidates act as an interpreter for two examiners, one speaking Arabic and one English (7 marks).
  - (d) Discussion. Candidates discuss a topic chosen at the time of the examination from a list of three provided the previous January (12 marks).
- (Sections (b), (c), and (d) are 30 minutes.)

*MES.32. Advanced Persian*

The examination consists of two parts, a three-hour written examination (70 marks) and an oral examination which is taken at the beginning of the fourth year (30 marks).

The written examination consists of two unseen passages of modern Persian for translation into English (20 marks each) and three topics for an essay of about 400 words in Persian, of which one must be attempted (30 marks). All questions must be attempted.

The oral examination consists of three sections. All timings are approximate and all oral examinations are recorded.

- (a) Dictation. Candidates write down an oral dictation from an unprepared passage (10 marks – 15 minutes).
- (b) Comprehension. Candidates are required to discuss the passage used in the dictation (5 marks – 10 minutes).
- (d) Discussion. Candidates discuss one topic selected at the time of the examination from a list of three, chosen and provided previously by themselves (15 marks – 20 minutes).

*MES.33. Advanced Hebrew*

The paper will be divided into two sections, at least one of which must be answered. Section A (Classical Hebrew) will contain three questions on Hebrew language and two questions on specified texts. Section B (Modern Hebrew) will contain two questions on Hebrew language, two questions on specified texts, and an oral. Candidates offering one section only must answer all questions. Candidates studying both Classical Hebrew and Modern Hebrew must offer one language question and one specified text question from Section A and one language question, one specified text question, and oral from Section B. Each question, including the oral, is worth 20 marks.

The oral will consist of (i) translation and interpretation test (5 marks); (ii) listening comprehension test (5 marks); (iii) general oral ability test (10 marks).

*MES.34. Themes in Arabic literature*

This paper will consist of three sections. Section A will contain a passage of Arabic chosen from the texts set as reading for the course, to be translated into English. Section B will contain a passage of unseen Arabic, to be translated into English. Section C will contain a choice of three essay questions, of which one must be attempted. All questions will carry equal marks.

*MES.35. Themes in Persian literature*

This paper will consist of two sections. Section A will consist of four passages, of which candidates will be required to choose two for translation and analysis. Section B will consist of four essay questions of which candidates will be required to attempt one. All questions carry equal marks.

*MES.36. Themes in Hebrew literature*

The paper will contain eight questions relating to Hebrew literature, of which four must be answered. All questions carry equal marks.

*MES.37. History of the pre-modern Middle East*

This paper will consist of eight essay questions of which students will be required to answer three. All questions will carry equal marks.

*MES.38. History of the modern Middle East*

This paper will consist of eight essay questions, of which candidates will be required to answer three. All questions will carry equal marks.

*MES.40. Special subject in the contemporary Middle East*

The course-work that constitutes this paper assessment consists of one research essay, of between 6,000 and 7,500 words, including footnotes and excluding bibliography. Each student will develop the topic of the essay in consultation with the instructor. A one-page topic and paper outline will be due during the first class session of Lent Term. Two copies of the project shall be submitted to the Programmes Administrator in the Faculty so as to arrive not later than the third Friday of full Easter Term.

*MES.41. Comparative Semitic linguistics*

The paper will consist of eight essay questions, of which candidates will be required to answer three, (*not* six questions on comparative Semitic Linguistics of which four must be answered, as previously advertised). All questions carry equal marks.

*X.9. Judaism II (Paper C.8 Judaism II of the Theological and Religious Studies Tripos)*

The examination for this paper will consist of a three-hour written paper which will be divided into two sections, A and B, corresponding to the set topics. Each section will contain at least eight questions. Candidates will be required to attempt four questions, including at least one from each section.

*X.10. Islam II (Paper C.9 Islam II of the Theological and Religious Studies Tripos)*

The examination for this paper will consist of a three-hour written paper divided into two sections, corresponding to the specified topics. Each section will contain at least eight questions. Candidates will be required to attempt four questions, including at least one from each section.

## **Economics Tripos, 2012**

The Faculty Board of Economics give notice that, with effect from the examinations to be held in 2012, the form of the examination for the following papers for the Economics Tripos will be changed as follows:

### PART I

There will be a reduction in the number of questions set from ten to eight for the following paper, with candidates being required to answer four questions:

Paper 4                    Political and sociological aspects of economics

### PART II A

*Paper 2 Macroeconomics*

From 2012 the paper will be divided into three sections, instead of two. Section A will have five compulsory questions (instead of three); Section B will require candidates to answer one out of two multi-part questions; Section C will require candidates to answer one out of five essay questions. Section A will carry 50% of the marks, while Sections B and C will each carry 25% of the marks, while all questions used to carry equal weight.

### PART II B

There will be a reduction in the number of questions set from ten to eight for the following papers, with candidates being required to answer four questions:

Paper 1                    Microeconomic principles and problems

Paper 4                    Economic theory and analysis

Paper 7                    Public economics

All other papers remain unchanged. Full details of the examination can be found on the Faculty website at <http://www.econ.cam.ac.uk/intranet/EconomicsFormandConductWEB.pdf>.

## **Geographical Tripos, Part IA, 2012**

The Faculty Board of Earth Sciences and Geography give notice that with effect from the examinations to be held in 2012, the form of the examinations for Part IA of the Geographical Tripos will be as follows:

### PART IA

Papers 1–3 will be replaced by Paper 1 (Human geography).

Papers 4 and 5 will be replaced by Paper 2 (Physical geography).

Paper 1 will be examined by a conventional unseen three-hour examination.

Paper 2 will be examined by a conventional unseen three-hour examination. It will be divided into three sections which are weighted equally. Section A will contain a single question. Sections B and C will each contain not less than four questions. Candidates will be required to answer three questions in total, one from each section.

## **Historical Tripos, 2012**

The Faculty Board of History give notice that with effect from the examinations to be held in 2012, the form of the examinations for certain papers of the Historical Tripos will be as follows:

### PART II

#### **Section D – Specified subjects**

*Paper 11 (Paper A28 of Part IIA (Archaeology) of the Archaeological and Anthropological Tripos). The archaeology of medieval Britain*

This paper is being examined for the first time. There will be one three-hour examination paper. Candidates will be required to answer three questions. The paper shall be the same as that for Paper A28 of Part IIA (Archaeology) of the Archaeological and Anthropological Tripos.

*Paper 12. The Middle Ages on film: medieval violence and modern identities*

This paper is being examined for the first time. There will be one three-hour examination paper. Candidates will be required to answer three questions.

*Paper 15. Food and drink in Britain and the wider world, 1577–1773*

This paper is being examined for the first time. There will be one three-hour examination paper. Candidates will be required to answer three questions.

*Paper 21. The French and the British problem, since 1688*

The paper will now be divided into Section A and Section B. Candidates will still be required to answer three questions, but at least one must be taken from each section.

*Paper 24. The politics of gender in Britain, c. 1790–1990*

The number of questions in Section A shall be three instead of six; the total number of questions for the paper (i.e. across Sections A and B) remains unchanged. Candidates will still be required to answer one question from Section A and two questions from Section B, but the question from Section A must be answered with reference to at least two of the set texts.

*Paper 30. ‘Islands and beaches’: The Pacific and Indian oceans in the long nineteenth century*

This paper is being examined for the first time. There will be one three-hour examination paper. Candidates will be required to answer three questions.

All other papers remain unchanged. Full details of the examination can be found on the Faculty website at <https://www.hist.cam.ac.uk/undergraduate/tripos-papers/part2-2011-12>.

## **Linguistics Tripos, 2012**

The Faculty Board of Modern and Medieval Languages give notice that, with effect from the examinations to be held in 2012, the form of the examinations for certain papers for the Linguistics Tripos will be changed as follows:

### *SECTION A*

*Paper 1 Sounds and words, Paper 2 Structures and meanings, Paper 3 Language, brain, and society, Paper 4 History and varieties of English*

Candidates are still required to answer both data questions from Section A. Candidates will now be required to place their answers to data questions in a theoretical context. Sample questions will be made available from the Department Office.

**SECTION C***Paper 13. History of the English language*

Candidates will be required to answer THREE questions, AT LEAST ONE from each section. Candidates must NOT use substantially the same material for more than ONE answer. There shall be two sections.

**SECTION D***Paper 23. The history of the Russian language*

There will now be three sections (instead of two). Candidates will be required to answer THREE questions. Candidates may answer from Sections A and B, but must NOT answer from Section C.

All other papers remain unchanged.

## **Modern and Medieval Languages Tripos, 2012**

The Faculty Board of Modern and Medieval Languages give notice that, with effect from the examinations to be held in 2012, the form of the examinations for certain papers for the Modern and Medieval Languages Tripos will be changed as follows:

**PART IA****SCHEDULE A***ITA3. Introduction to Italian language 3: Texts and contexts*

Candidates will be required to answer THREE questions. Candidate will no longer be required to answer each question from a different section.

*PGB2. Translation from Portuguese*

Candidates will be required to translate TWO passages (instead of three). The word count for each passage shall be raised from a minimum of 200 to 250, so that candidates are required to translate two passages of 250–300 words each.

*SPB2. Translation from Spanish*

Candidates will be required to translate TWO passages (instead of three). The word count for each passage shall be raised from a minimum of 200 words to 250 words, so that candidates are required to translate two passages of 250–300 words each.

**SCHEDULE B***Ge. 1. Introduction to German studies*

Candidates will be required to answer THREE questions. Candidates must NOT use substantially the same material for more than ONE answer. There will be six questions and no sections.

*It. 1. Texts and contexts*

Candidates will be required to answer three questions. Candidates will no longer be required to answer each question from a different section.

**PART IB***Fr. 9. French literature, thought, and history, from 1789 to 1898*

This paper will not be available as a portfolio of essays option for examination in 2012.

*It. 5. Italian identities: place, language, and culture*

Candidates will be required to answer THREE questions. Candidates must NOT use substantially the same material for more than ONE answer.

*Ru. 6. Russian culture after 1880*

Candidates will be required to answer THREE questions, ONE from Section A and TWO from Section B. Candidates must ensure that at least ONE answer in Section B refers substantively to at least ONE literary source.

*Ru. 9. The history of the Russian language*

There will now be three sections (instead of two). Candidates for Part Ib MML will be required to answer any THREE questions.

**PART II***CS. 5. A special subject in comparative literature: the body*

Candidates must answer THREE questions in total from AT LEAST TWO sections. Their answers should show knowledge of material from THREE language areas, which may include English OR a language in translation, in the paper as a whole, and from AT LEAST TWO language areas in any ONE answer. Candidates may answer with reference to literature, theory, film, and art, as appropriate.

Candidates for this paper may NOT draw substantially on material from their dissertations or material which they have used or intend to use in another scheduled paper. Candidates may NOT draw substantially on the same material in more than ONE question on the same paper.

*CS. 6. European film*

Candidates must answer THREE questions. Each answer should show knowledge of films from TWO OR MORE language areas, which may include English. Scripts as a whole must show substantial knowledge of cinema from TWO OR MORE of the paper's five specified language areas (French, German, Italian, Russian, and Spanish). Candidates must NOT use substantially the same material for more than ONE answer.

*It. 7 Dante and the culture of his age*

The following sentence shall be REMOVED from the rubric:

Except in answering Questions 6–9, you are not obliged to make reference to Dante, but may do so if you wish.

*Li. 13 History of the English language*

Candidates will be required to answer THREE questions, AT LEAST ONE from each section. Candidates must NOT use substantially the same material for more than ONE answer. There shall be two sections.

*Ru. 6 Russian culture after 1880*

Candidates will be required to answer THREE questions, ONE from Section A and TWO from Section B. Candidates must ensure that at least ONE answer in Section B refers substantively to at least ONE literary source.

*Ru. 9 The history of the Russian language*

There will now be three sections (instead of two). Candidates for Part II MML will be required to answer THREE questions. Candidates must answer Question 1 AND TWO other questions from Section B. Candidates will not be permitted to answer from Section C.

All other papers remain unchanged.

## Natural Sciences Tripos, 2012

The Committee of Management for the Natural Sciences Tripos give notice that, with effect from the examinations to be held in 2012, the form and conduct of certain of the examinations for the Natural Sciences Tripos will be changed as follows:

### PART IA

#### Computer Science

The form and conduct for the Computer Science paper is as announced for Paper 1 of the Computer Science Tripos.

#### Earth Sciences

*Written paper*

The paper will be divided into section A and B.

Section A: Candidates will choose to answer four theory questions from a choice of eight (as opposed to five questions from a choice of ten).

Section B: Candidates will attempt a compulsory quantitative question based on calculations.

*Practical examination*

The practical exam will now be of three hours' duration instead of four. The calculation question has been moved to the theory paper. The paper will be divided into four equal sections covering: (a) Hand specimens of rocks, minerals, or fossils, (b) Thin section work, (c) Palaeontology, and (d) Map work.

#### Mathematical Biology

The relative weightings of the examination components have changed. The written paper will account for 90% of the total mark available (instead of 70%) and the continually-assessed component will account for 10% of the total mark available (instead of 30%). There is no change to the format of either component.

#### Physiology of Organisms

The weighting of the sections within the examination has changed. The written paper, which will carry 100% (instead of 95%) of marks, will be in three sections: A, B, and C. Section A will carry 25% of the total marks (instead of 35%), Section B (assessing practical work) will carry 25% of the total marks (instead of 20%), and Section C will carry 50% of the total marks (instead of 40%). (Previously, practical notebooks made up the remaining 5%.)

**PART IB****Cell and Developmental Biology***Paper 2. Section A.*

Candidates will be asked to answer eight short questions out of eight questions set instead of eight chosen out of ten as in previous years. All other papers remain unchanged.

**Chemistry A**

There are two three-hour written papers set for Chemistry A: Papers A1 and A2. Each paper will contain five questions of equal weight; candidates are required to answer all five questions.

Paper A1 will contain two questions relating primarily to the material presented in the lecture course ‘Introduction to quantum mechanics’, one question relating primarily to the material presented in the lecture course ‘Molecular spectroscopy’ and two questions relating primarily to the material presented in the lecture course ‘Symmetry and bonding’. Any question may, however, draw on material from the whole of the Chemistry A course.

Paper A2 will contain two questions relating primarily to the material presented in the lecture course ‘Molecular energy levels and thermodynamics’ and three questions relating primarily to the material presented in the lecture course ‘Electronic structure and properties of solids’. Any question may, however, draw on material from the whole of the Chemistry A course.

**Chemistry B**

There are two three-hour written papers set for Chemistry B: Papers B1 and B2. Each paper will contain five questions of equal weight; candidates are required to answer all five questions.

Paper B1 will contain questions relating primarily to the material presented in the lecture courses ‘Key organic reactions’, ‘Structure determination’, and ‘Shape and organic reactivity’. Any question may, however, draw on material from the whole of the Chemistry B course.

Paper B2 will contain three questions relating primarily to the material presented in the lecture courses ‘Inorganic ring chemistry’, ‘Co-ordination chemistry’, and ‘Organometallic chemistry’, and two questions relating primarily to the material presented in the lecture course ‘Introduction to chemical biology’. Any question may, however, draw on material from the whole of the Chemistry B course.

**Materials Science**

Two written papers will be set, each of three hours’ duration. Each paper will consist of seven questions, from which candidates will be required to answer any five. Each paper may contain questions based on any part of the course. All other parts of the examination remain unchanged. Full details are available at <http://www.msm.cam.ac.uk/teaching/>.

**Neurobiology**

Paper 2 will no longer consist of multiple-choice questions but will contain twenty short-answer questions of equal weight; candidates are required to answer all twenty questions. All other parts of the examination remain unchanged.

Full details of the examination can be found by following the appropriate links from <http://www.bio.cam.ac.uk/teaching/nstneurobiology/>.

**Physics A**

The contents of Paper 1 and Paper 2 are interchanged.

Paper 1 will contain four sections: candidates should answer all questions from Section A, two questions from Section B, one question from Section C, and one question from Section D. Section A will contain five short questions, and is worth about one fifth of the total marks for the paper; Section B will contain four problem questions on Quantum physics; Section C will contain two questions on Quantum physics; these questions being essays, brief notes, largely descriptive questions, or less-structured problems; Section D will contain two questions on Experimental methods, one of which will be an essay, brief notes, largely descriptive question, or less-structured problem.

Paper 2 will contain four sections: candidates should answer all questions from Section A, two questions from Section B, one question from Section C, and one question from Section D. Section A will contain five short questions, and is worth about one fifth of the total marks for the paper; Section B will contain four problem questions on Oscillations, waves, and optics; Section C will contain two problem questions on Condensed matter physics; Section D will contain two questions on the same courses as Sections B and C, these questions being essays, brief notes, largely descriptive questions, or less-structured problems.

**Physics B**

The contents of Paper 1 and Paper 2 are interchanged.

Paper 1 will contain three sections: candidates should answer all questions from Section A, two questions from Section B, and two questions from Section C. Section A will contain five short questions, and is worth about one fifth of the total marks for the paper; Section B will contain four problem questions on Electromagnetism; Section C will contain four problem questions on Classical Dynamics.

Paper 2 will contain three sections: candidates should answer all questions from Section A, two questions from Section B, and two questions from Section C. Section A will contain five short questions, and is worth about one fifth of the total marks for the paper; Section B will contain four questions on Electromagnetism and classical dynamics, these questions being essays, brief notes, largely descriptive questions, or less-structured problems; Section C will contain four questions on Thermodynamics, one of which will be an essay, brief notes, a largely descriptive question, or a less-structured problem.

**PART II****Astrophysics**

The one-and-a-half hour paper has been discontinued. There will be four papers of three hours' duration. Each of these four papers consists of eight questions, one from each of the eight courses; candidates may attempt not more than six questions from each paper. Each question has the same weighting.

**Experimental and Theoretical Physics**

Candidates are required to take the following:

- (a) a computing exercise
- (b) three or more units of further work, as outlined in the Physics Course Handbook. If a candidate offers more than three units of further work the Examiners will take into account the three units which they judge to be the best.
- (c) Papers 1, 2, 3, and 4
- (d) a minimum of three and a maximum of four from Papers 5, 6, 7, and 8. If a candidate offers four papers the Examiners will take into account the three papers which they judge to be the best. Each paper is of two hours' duration and shall contain four questions. Question 1 shall consist of three short parts. Question 2 shall be of the brief notes style. Candidates must attempt question 1, question 2, and one other question. Each of questions 1 and 2 has approximately one quarter of the total weight of the paper.

The titles of the papers are as follows:

Paper 1	TSP	Thermal and statistical physics
Paper 2	REL	Relativity
Paper 3	AQP	Advanced quantum physics
Paper 4	OE	Optics and electrodynamics
Paper 5	AFD	Astrophysical fluid dynamics
Paper 6	PNP	Particle and nuclear physics
Paper 7	QCM	Quantum condensed matter physics
Paper 8	SCM	Soft condensed matter

**History and Philosophy of Science**

The titles of the papers are as published. There will be one question fewer in Section B; candidates will be required to answer three questions from eight (instead of nine). Sample papers will be published at <http://www.hps.cam.ac.uk>.

**Physical Sciences, Half Subject Experimental and Theoretical Physics**

Candidates are required to take the following:

- (a) a computing exercise
- (b) two units of further work, as outlined in the Physics Course Handbook
- (c) two papers from Papers 1, 2, 3, and 4
- (d) one paper from Papers 5, 6, 7, and 8. Each paper is of two hours' duration and shall contain four questions. Question 1 shall consist of three short parts. Question 2 shall be of the brief notes style. Candidates must attempt question 1, question 2, and one other question. Each of questions 1 and 2 has approximately one quarter of the total weight of the paper.

The titles of the papers are as follows:

Paper 1	TSP	Thermal and statistical physics
Paper 2	REL	Relativity
Paper 3	AQP	Advanced quantum physics
Paper 4	OE	Optics and electrodynamics
Paper 5	AFD	Astrophysical fluid dynamics
Paper 6	PNP	Particle and nuclear physics
Paper 7	QCM	Quantum condensed matter physics
Paper 8	SCM	Soft condensed matter

**Plant Sciences**

As the Synthetic Biology Module is no longer offered, the separate section for those candidates has been removed. For both Paper 1 and Paper 2, candidates are now required to answer three questions; not more than two from any one section. All other papers remain unchanged. Full details of the examination can be found by following the appropriate links from <http://www.cam.ac.uk/cambuniv/natscitripos/links.html>.

**PART III****Interdisciplinary Papers**

The Interdisciplinary papers (IDP1 Atmospheric chemistry and global change, IDP2 The Earth system and climate change, and IDP3 Materials, electronics, and renewable energy), will each be of one and a half hours' duration instead of one hour.

**Geological Sciences**

Paper IDP2, The Earth system and climate change, will be of one and a half hours' duration instead of one hour. The practical examination for Geological Sciences candidates will now take place through assessed practicals held during the Lent Term. Full details of the examinations can be obtained in the relevant course booklet.

### **Materials Science (including the Master of Advanced Study, M.A.St.)**

Paper 1 of the written examination will contain two sections, A and B. Section A will contain questions based on the core techniques courses, T1, T2, and T3. Section B will contain a number of essay-style questions, of which candidates will be required to answer one. Sections A and B will be worth equal credit.

Paper 1 of the written examination will be worth 20% of the total marks for Part III Materials Science. Papers 2 and 3, which remain unchanged in form, will each be worth 25% of the total marks.

25% of the total marks for Part III Materials Science will be based on the individual research project, which will be assessed via a range of reports and presentations.

5% of the total marks will be based on the transferable skills option. The long vacation report and presentation will not contribute to Part III Materials Science in 2011–12.

Full details are available at <http://www.msm.cam.ac.uk/teaching/>.

## **Examination for the degree of Master of Finance, Lent Term 2012**

The Faculty Board of Business and Management give notice that in the Lent Term 2012 the subjects for examination for the Master of Finance Degree will be as listed below. The method of examination is shown for each subject.

### **Course-work (compulsory subjects)**

Equity derivatives	Two-hour class test
Management practice	Seminar, assessed by attendance
Finance and organizations	Seminar, assessed by attendance
City speaker series	Seminar, assessed by attendance

### **Course-work (elective subjects)**

Credit derivatives (open to M.Phil. in Finance)	Individual assignment (50%), group assignment (50%)
Fixed income analysis (open to M.Phil. in Finance)	Individual essay (30%), two-hour class test (70%)
Topics in investment management (open to M.B.A./E.M.B.A.)	Four individual assignments (17.5% each), one group assignment (30%)
Topics in financial history (open to M.B.A./E.M.B.A.)	Four individual assignments (25% each)
Private equity (open to M.B.A.)	Three individual assignments (10%, 15%, and 10%), four group assignments (15%, 20%, 20%, and 10%)
Further econometrics	Two workbooks (45% each), bi-weekly online group tests (total 10%)
Advanced corporate finance	Two-hour class test (50%), group assignment (50%)
Financial reporting and capital markets (borrowed from M.Phil. in Finance)	Two individual essays (50% each)

### **Projects**

Group Consulting Project	Group project, assessed by group presentation and report
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## **Examinations in Conservation Leadership, Environmental Science, Geographical Research, Multi-Disciplinary Gender Studies, and Polar Studies for the degree of Master of Philosophy**

The Faculty Board of Earth Sciences and Geography give notice that the form of the examination for 2011–12 will be as listed below.

### **1. Timetable of submission and weight of marks**

#### **Conservation Leadership**

<i>Component</i>	<i>Item</i>	<i>Submission date</i>	<i>Weighting (%)</i>
1	CL1: Conservation problems and practice course-work	Monday, 16 January	10
	CL6: Innovation for conservation leadership course-work	Monday, 26 March	10
2	CL2: Conservation enterprise essay	Monday, 2 April	10
	CL3: Conservation management exercise	Monday, 2 April	10
	CL4: Communicating conservation exercise	Monday, 23 April	10
	CL5: Conservation governance essay	Monday, 23 April	10
3	Placement Report	Thursday, 30 August	40

**Environmental Science**

<i>Component</i>	<i>Item</i>	<i>Submission date</i>	<i>Weighting (%)</i>
1	Exercise 1	Monday, 5 December	12.5
	Exercise 2	Monday, 13 February	12.5
	Exercise 3	Monday, 19 March	12.5
	Exercise 4	Tuesday, 1 May	12.5
2	Thesis	Monday, 20 August	50

**Geographical Research**

<i>Component</i>	<i>Item</i>	<i>Submission date</i>	<i>Weighting (%)</i>
1	Geographical essay 1	Monday, 30 April	13.33
	Geographical essay 2	Monday, 30 April	13.33
	Joint schools essay	Monday, 30 April	13.33
2	Joint schools 'open-book' online tests	Friday, 9 December (for Basic statistics) or Friday, 23 March (for Advanced statistics)	
	3	Tuesday, 20 August	60

**Multi-disciplinary Gender Studies**

<i>Component</i>	<i>Item</i>	<i>Submission date</i>	<i>Weighting (%)</i>
1	Essay 1	Wednesday, 14 March	15
	Essay 2	Monday, 30 April	15
2	Thesis	Monday, 30 July	70

**Polar Studies**

<i>Component</i>	<i>Item</i>	<i>Submission date</i>	<i>Weighting (%)</i>
1	Essay 1	Monday, 7 November	15
	Essay 2	Monday, 5 December	15
	Essay 3	Monday, 30 January	15
2	Thesis	Thursday, 14 June	55

**2. Thesis subject area deadlines**

The subject area of each thesis/project must be approved by the Degree Committee of Earth Sciences and Geography. The deadline for this is **Monday, 6 February 2012**.

**3. Oral examination (Viva)**

Each M.Phil. may include, at the discretion of the Examiners, an oral examination on the thesis/project that has been submitted, the general field of knowledge within which it falls, or other parts of the relevant M.Phil. course. All students must be available in Cambridge for an oral examination and must be in contact with the Graduate Office by telephone or email in order that arrangements can be made, if required. The dates of the oral examination (if required) are:

M.Phil. in Conservation Leadership	Wednesday, 19 September
M.Phil. in Environmental Science	Thursday, 7 June/Monday, 17 September
M.Phil. in Geographical Research	Tuesday, 18 September
M.Phil. in Multi-disciplinary Gender Studies	Thursday, 13 September
M.Phil. in Polar Studies	To be confirmed

**4. Submission**

All assignments are to be submitted to the Graduate Office (or M.Phil. Administrator) by 4 p.m. on the day stated – **two** copies with a signed cover sheet. *The M.Phil. in Multi-disciplinary Gender Studies and M.Phil. in Conservation Leadership may have a different submission time. Please check your course Handbook.* Polar Studies students are to submit to SPRI Director's Assistant at the Scott Polar Research Institute.

**5. Pass requirements**

In order to be awarded the Degree of Master of Philosophy, candidates must achieve a total score of at least 60%. Furthermore, candidates are expected to pass all components by achieving a score of at least 60% of the marks allocated to the component. In the event that a candidate scores a marginal fail in one component of the examination, this may be compensated for by an overall average of 60% or more.

**Examination in Finance for the degree of Master of Philosophy, 2011–12**

The Degree Committee for the Faculty of Business and Management give notice that in the academical year 2011–12 the subjects for the examination in Finance for the M.Phil. Degree will be as listed below. The method of examination is shown for each subject.

**Group 1 (compulsory subjects)**

- (1) MF2. Principles of finance (two-hour written examination, plus group project comprising written report and presentation)

*Either*

- (2) M300. Econometric methods (two-hour written examination) **and**
- (3) M310. Time series econometrics and financial econometrics (two-hour written examination) **or**
- M320. Cross section and panel data econometrics (two-hour written examination)

*Or*

- (2) MP0-1. Quantitative research methods (assessed by two workbooks of research exercises, 40%/60%) **and**
- (3) MP01A. Quantitative research methods – Advanced (assessed by four workbooks, with 20% each for the first three workbooks, 30% for workbook 4 and 10% for the weekly exercises)
- (4) MFin10. Economic Foundations of Finance (1.5-hour written examination)

Two of the following shall be taken as a Group 1 subject. The remaining subjects may be selected as Group 2 (optional papers).

M400	Asset pricing (two-hour written examination)
MF4	Empirical research in finance and accounting (assessed by two 2,000-word essays)
MF12	Topics in corporate finance (assessed by research presentation (40%) and essay of 3,000 words (60%))
MF40	International financial econometrics (assessed by two-hour class test)
MF13	Credit derivatives (assessed by course-work)
MF14	Fixed income analysis (assessed by written examination and course-work)
MF17	Venture capital deal-making (assessed by written examination)
MAT3	Optimal investment (one two-hour written examination)

#### **Group 2 (optional papers)**

M100	Microeconomics I (two-hour written examination)
MF1	Introduction to financial reporting (assessed by two-hour class test and presentation)
MF3	Financial reporting and capital markets (assessed by two 2,000-word essays)
TPE6	Strategic valuation (assessed by project consisting of written report and associated spreadsheet model)

#### **Papers from Part III of the Mathematical Tripos**

Advanced financial models (one three-hour written examination)
Actuarial statistics (one two-hour written examination)
Stochastic calculus and applications (one three-hour written examination)
Time series and Monte Carlo inference (one two-hour written examination)
Numerical analysis of partial differential equations (one three-hour written examination)

A 12,000-word dissertation could be substituted in place of three modules.

## **Examination in Innovation, Strategy, and Organization for the degree of Master of Philosophy, 2011–12**

The Degree Committee for the Faculty of Business and Management give notice that in the academical year 2011–12 the subjects for examination in Innovation, Strategy, and Organization for the M.Phil. Degree will be as listed below. The method of examination is shown for each subject.

#### **Group 1 Compulsory subjects**

MP0-1 JSSS	Quantitative research methods (assessed by a number of research exercises as determined by the module leader)
MP0-2	Qualitative research methods (assessed by seven research exercises)
MISO1	Information systems, innovation, and organizational change (assessed by 3,000-word essay (70%), plus half-hour seminar presentation (30%))
MISO2	Strategy and innovation (assessed by 3,000-word essay (30%), plus half-hour seminar group presentation (30%), plus one-hour class test (40%))
MISO3	Foundations of organizational analysis (assessed by 3,000-word essay (70%), plus half-hour seminar group presentation (20%), plus class participation (10%))

#### **Group 2 Optional papers**

MISO-5	Social networks and organizations (assessed by class test (50%), class participation (25%), twenty-minute seminar presentation (25%))
MISO-6	Marketing, innovation, and emerging economies (assessed by 3,500-word essay (70%), class participation (10%), twenty-minute seminar presentation (20%))
MMSO2	Operations strategy and technology management (class participation (20%), summary of reading (20%), paper on research opportunities (30%), review report (30%))
MM10	Globalization at the crossroads (assessed by 4,000-word essay)
MM33	Financial markets, risk, and regulation (assessed by 3,000-word essay)

#### **Dissertation**

12,000-word dissertation.

## **Examination in Management for the degree of Master of Philosophy, 2011–12**

The Degree Committee for the Faculty of Business and Management give notice that in the academical year 2011–12 the subjects for examination in Management for the M.Phil. Degree will be as listed below. The method of examination is shown for each subject.

### **Group 1 (compulsory subjects)**

MM1	Quantitative techniques for management (assessed by two-hour class test)
MM2	Information systems (assessed by two-hour class test)
MM6	Accounting and finance (assessed by two-hour class test)
MM3	Business economics (assessed by two-hour class test)
MM4	Strategic management (assessed by two-hour class test)
MM5	Organizational analysis (assessed by two-hour class test)
MM30	Marketing (assessed by two-hour class test (70%), plus group project presentation (30%))
MM35	Management consulting project (assessed by one-hour joint presentation (50%), plus 3,000-word essay (25%), plus class participation (25%))
MM37	Operations management (assessed by two-hour class test)

### **Group 2 (optional papers)**

MM10	Globalization at the crossroads (assessed by 4,000-word essay)
MM11	Human resources management (assessed by 4,000-word essay)
MM20	Environment and sustainability (assessed by 3,000-word essay, plus one-hour seminar presentation)
MM33	Financial markets, risk, and regulation (assessed by 3,000-word essay)
TPE6	Strategic valuation (project consisting of written report and associated spreadsheet model)
MF3	Financial reporting and capital markets (assessed by two 2,000-word essays)
MISO-5	Social networks and organizations (assessed by one and half-hour class test (50%), plus class participation (25%), plus twenty minutes seminar presentation (25%))

## **Examination in Management Science and Operations for the degree of Master of Philosophy, 2011–12**

The Degree Committee for the Faculty of Business and Management give notice that in the academical year 2011–12 the subjects for examination in Management Science and Operations for the M.Phil. Degree will be as listed below. The method of examination is shown for each subject.

### **Group 1 (compulsory subjects)**

- (1) MP0-1 Quantitative research methods (assessed by two workbooks of research exercises)
- (2) MP0-1A Quantitative research methods – Advanced (assessed by four workbooks, with 20% each for the first three workbooks, 30% for workbook 4, and 10% for the weekly exercises)
- (3) MMSO1 Management science research methods (two progress reports (20% each), class presentation (10%), and final presentation of the dissertation results (50%))
- (4) MMSO2 Operations strategy and technology management (class participation (20%), summary of reading (20%), paper on research opportunities (30%), review report (30%))

**Dissertation** 12,000-word dissertation

### **Group 2 (optional papers)**

MAT3	Mathematics of operational research (three-hour written examination)
MISO-1	Information systems, innovation, and organizational change (assessed by 3,000-word essay (70%), half-hour seminar presentation (30%))
MISO-2	Strategy and innovation (assessed by 3,000-word essay (30%), half-hour seminar group presentation (30%), one-hour class test (40%))
MISO-3	Foundations of organizational analysis (assessed by 3,000-word essay (70%), half-hour seminar group presentation (20%), class participation (10%))
MISO-5	Social networks and organizations (assessed by class test (50%), class participation (25%), twenty minutes seminar presentation (25%))
MISO-6	Marketing, innovation, and emerging economies (assessed by 3,500-word essay (70%), class participation (10%), twenty-minute seminar presentation (20%))

It is also possible to take a selection of mathematics and/or engineering graduate courses as optional papers if deemed suitable for a particular student's research work.

## **Examination in Technology Policy for the degree of Master of Philosophy, 2011–12**

The Degree Committee for the Faculty of Business and Management give notice that in the academical year 2011–12 the subjects for examination in Technology Policy for the M.Phil. will be as listed below.

The Technology Policy Professional Practice degree corresponds to 15 equally weighted modules including four core modules, the Final Group Project, which is weighted two times, MOT&I which is weighted two times, and seven electives (three of which must be chosen from the outer core).

The Technology Policy research stream corresponds to nine equally weighted modules including three core modules, one elective, two research modules, and the Research Dissertation which is weighted three times.

### **Group 1 (core components for professional practice stream)**

<i>Module code</i>	<i>Module title</i>	<i>Assessment</i>
TP1	Introduction to technology policy	Mid-term written in-class assessment one hour (30%), class participation (10%), 3,000-word final assignment (60%)
TP2	Seminars in technology policy	Eight 1,000-word essays
TP3	European science and technology policy	3,000-word essay (80%), presentation/participation (20%)
TP4	Complexity and negotiation	One 1,500-word essay (50%), one 1,000-word essay (35%), class participation (15%)
FGP	Final group project (weighted x 2) for those on Professional Practice Stream	12,000-word report (70%), oral presentation (20%), supervisor and peer assessment (10%)
MOT&I	Management of technology and innovation (weighted x 2)	1,500-word essay, group project over two months

### **Group 2 (outer core components – at least three to be selected from a choice of seven electives for professional Practice Stream)**

<i>Module code</i>	<i>Module title</i>	<i>Assessment</i>
TPE6/4I1	Strategic valuation	Project consisting of written report and associated spreadsheet model
TPE7	Political economy of technology policy	3,000-word essay (80%), presentation (20%)
TPE8	System dynamics for policy and management	Three 1,000-word assignments (20% each), one 3,000-word final team project (30%), final presentation (10%)
TPE10/5CMI4	Government policy towards technology development and innovation	Two 500-word pieces (15% each), one 4,000-word essay (70%)
TPE11/4E4	Management of technology	3,000-word assignment
TPE12/4I7	Electricity and the environment	One 1,500-word essay (30%), one 2,000-word essay (70%)
TPE13/4E3	Information systems	Four 800-word assignments (25% each)

### **Group 3 (optional components)**

<i>Module code</i>	<i>Module title</i>	<i>Assessment</i>
MM10	Globalization	4,000-word essay
MM20	Environment and sustainability	3,000-word essay, one-hour seminar presentation
MISO1	Information systems, innovation, and organizational change	3,000-word essay (70%), half-hour seminar presentation (30%)
MISO2	Strategy and innovation	3,000-word essay (30%), half-hour seminar group presentation (30%), one-hour class test (40%)
MSIO5	Social networks and organizations	Class test (50%), class participation (25%), twenty-minute seminar presentation (25%)
MSIO6	Marketing, innovation, and emerging economics	3,500-word essay (70%), class participation (10%), twenty-minute seminar presentation (20%)
4A3	Turbo machinery 1	1.5-hour examination (75%), report (25%)
4A4	Aircraft stability and control	Course-work (100%)
4A7	Aerodynamics	Two reports (50% each)
4A8	Environmental fluid mechanics	1.5-hour exam (100%)
4A13	Combustion and IC engs	1.5-hour examination (100%)
4B5	Nanotechnology	1.5-hour examination (75%), Simulation study (25%)
4B6	Solid state devices and chemical/biological sensors	1.5-hour exam (100%)
4B7	VLSI design, technology, and CAD	1.5-hour exam (75%), course-work (25%)
4B18	Advanced electronic devices	1.5-hour exam (100%)

4B19	Renewable electrical power	1.5-hour exam (100%)
4C2	Designing with composites	1.5-hour exam (75%), course-work (25%)
4C3	Electrical and nano materials	1.5-hour exam (100%)
4C4	Design methods	1.5-hour exam (100%)
4C5	Design case studies	Course-work (100%)
4C15	MEMS: design	1.5-hour exam (75%), course-work (25%)
4D4	Ground engineering	Three reports
4D6	Dynamics in civil engineering	1.5-hour exam (75%), course-work (25%)
4D14	Contaminated land and waste management	1.5-hour exam (75%), course-work (25%)
4D15	Sustainable water engineering	Course-work (100%)
4E5	International business economics	Course-work (100%)
4E6	Accounting and finance	Course-work (100%)
4E11	Strategic management for engineers	Course-work (100%)
4E12/5CMI5	Project management	Group work (5%), report (95%)
4F1	Control system design	1.5-hour exam (75%), course-work (25%)
4F5	Advanced wireless	1.5-hour exam (100%)
4F6	Signal detection and estimation	1.5-hour exam (100%)
4F11	Speech and language processing	1.5-hour exam (100%)
4F12	Computer vision and robotics	1.5-hour exam (100%)
4G1	Systems biology	1.5-hour exam (100%)
4M15	Sustainable energy	1.5-hour exam (75%), course-work (25%)
4M16	Nuclear power engineering	1.5-hour exam (100%)
5R15	Sustainable development	Course-work (100%)
ESD100	Concepts, values, and change	Course-work (100%)
ESD200	Sustainable methods and metrics	Course-work (100%)
ESD300	Sustainability assessment of large infrastructure projects	Course-work (100%)
ESD400	Economic, legal, and regulation issues	Course-work (100%)
ESD500	Sustainable design and implementation	Course-work (100%)
ESD600	Social networks and organizations	Course-work (100%)

**Group 1 (core components for research stream)**

Module code	Module title	Assessment
TP1	Introduction to technology policy	Mid-term written in-class assessment one hour (30%), class participation (10%), 3,000-word final assignment (60%)
TP2	Seminars in technology policy	Eight 1,000-word essays
TP3	European science and technology policy	3,000-word essay (80%), presentation/participation (20%)
RP	Research project (weighted x 3) for those on Research Stream	12,000 words
MP01	Quantitative research methods	Two workbooks of research exercises (40%/60%)
MP02	Qualitative research methods	Seven research exercises

**Group 2 (electives components – one elective to be selected for research stream)**

Module code	Module title	Assessment
TP4	Complexity and negotiation	One 1,500-word essay (50%), one 1,000-word essay (35%), class participation (15%)
TPE7	Political economy of technology policy	3,000-word essay (80%), presentation (20%)
TPE10/5CMI4	Government policy towards technology development and innovation	Two 500-word pieces (15% each), one 4,000-word essay (70%)

## REPORTS

### Joint Report of the Council and the General Board on a retirement policy for University staff

The COUNCIL and the GENERAL BOARD beg leave to report to the University as follows:

#### INTRODUCTION

1. In October 2010 the Human Resources Committee set up a working group to consider the University's options in the light of the Government's proposed abolition of the statutory Default Retirement Age. The consequent legislative changes came into force from 6 April 2011 with the effect that (subject to certain transitional arrangements) employers can no longer rely on an exemption in age discrimination legislation to retire employees once they have reached the age of 65. Any compulsory retirement must now be objectively justified by an employer as a proportionate means of achieving a legitimate aim.

2. The working group invited comments from staff during January 2011<sup>1</sup> and in May 2011 the Council and the General Board issued a joint consultative paper,<sup>2</sup> setting out possible options and inviting comments through a consultation exercise. This exercise comprised four open staff meetings, a Discussion in the Regent House on 17 May 2011,<sup>3</sup> submissions to a dedicated mailbox, and discussions with relevant trade unions. Subsequently, the working group has conducted further informal consultation with School Councils and Faculty Boards.

3. The Council and the General Board are very grateful to those who have contributed to the various consultation processes. Their submissions have been carefully considered by the working group. Although a broad range of views was expressed, the majority of responses, including the response from each of the Councils of the six Schools, were in favour of continuing a retirement age for established staff, providing that appropriate arrangements for considering extensions of employment beyond that age were in place. There was no similar consensus supporting a retirement age for other groups of staff.

4. This Joint Report now puts forward proposals for a retirement policy for University staff, based on recommendations of the working group.

#### SUMMARY

5. In summary, the Council and the General Board propose that the current long-standing provision for the retirement of all officers (with certain specified exceptions) at the end of the academical year in which they reach 67 should be maintained.<sup>4</sup> However, to ensure that this approach does not operate to preclude the continued employment of staff members where the mutual interests of the employee and the University justify it, it is proposed that it should be complemented by a process for permitting extended working beyond the retirement age in appropriate cases.

6. In the case of all other staff, it is proposed that a compulsory retirement age should no longer apply. This position is supported by the trade unions representing assistant staff.

#### RATIONALE

7. In reaching their decision to put forward the arrangements described above, the Council and the General Board have considered the factors set out below, together with the summary data tables attached as Appendix 1, to be persuasive.

##### *(a) Inter-generational fairness and career progression*

8. The evidence strongly suggests that there are grounds for real concern that the removal of a retirement age in the case of established officers would lead to a detrimental imbalance in the spread of ages and experience across this core section of the University's workforce, and would in turn adversely impact the career prospects of those at the outset of their academic careers. Such prospects are already vulnerable to the effects of the relatively low turnover of staff, and the fact that the number of posts at a senior level are in practice finite and significantly fewer than at more junior levels. As Table A of Appendix 1 shows, if no or few established academics retired, then the number of vacancies would fall dramatically, whereas if no or few assistant staff retired, the corresponding impact would be substantially smaller.

9. In the course of the consultation exercise it was argued by some contributors that it was speculative to suggest that large numbers of academic staff would choose to continue in post after the age of 67 if they were not obliged to retire. In fact, an analysis of recent retirements indicates that the proportion of academic staff who currently chose to work beyond their pensionable age and up to the current retirement age is significant and very much greater than in the case of other staff categories. It is reasonably to be inferred that many academic staff would elect to continue in employment beyond the age of 67 if they were able and this inference is supported by the experience of universities in countries where no retirement age is applied and by the results of surveys of employee intentions.

10. Moreover, the analysis further demonstrates that (contrary to some suggestions in the course of the consultation) the continued employment of more senior academic staff has the effect of blocking the opportunities of more junior staff for promotion. In particular, the evidence shows that retirement is proportionately a much more significant source of new vacancies amongst established staff than it is among unestablished staff.

##### *(b) Innovation in research and knowledge creation*

11. The responses from the consultation exercise generally supported the proposition that within an academic community a balanced mix of collaborators across a range of generations is vital to invigorating the academic dialogue which is essential to developing cutting-edge research at an international level and agreed that the University's leading status in this regard could be jeopardized if this balance were to be displaced by the removal of a retirement age.

<sup>1</sup> <http://www.admin.cam.ac.uk/reporter/2010-11/weekly/6209/section1.shtml#heading2-11>

<sup>2</sup> <http://www.admin.cam.ac.uk/reporter/2010-11/weekly/6222/section1.shtml#heading2-5>

<sup>3</sup> <http://www.admin.cam.ac.uk/reporter/2010-11/weekly/6226/section8.shtml#heading2-24>

<sup>4</sup> Statute D, I, 11 prescribes that all University officers (other than the Chancellor, the High Steward, the Deputy High Steward, the Commissary, and any University officer who is exempted under any Statute from the provisions of this section) shall vacate their offices not later than the end of the academical year in which they attain the age of sixty-seven years.

12. Some contributors have wrongly read into this factor an assumption that academic performance declines with age and the Council and the General Board wish to stress that no such assumption underlies their proposals for retaining a retirement age as described above.

*(c) Preservation of academic autonomy and freedom*

13. Officers of the University have the benefit of unique and specific protections which preserve academic autonomy and freedom throughout the course of their careers.

14. A fixed retirement age complements such protections by providing a means of ending an academic's formal employment at a specific point without the need for career-long performance management processes.

*(d) Equality and diversity*

15. As Table B of Appendix 1 shows, a retirement age is likely to assist the University in addressing the historical under-representation of women at senior levels.

#### CONCLUSION

16. In short, the Council and the General Board are satisfied that a retirement age for University officers at the end of the academical year in which they attain the age of 67 can properly be justified as a means of achieving outcomes which are integral to the proper and effective functioning of the University's mission as a leading international university. The Council and the General Board are not, however, persuaded that the evidence supports a case for continuing to impose a retirement age across other staff categories within the University.

#### PROPORTIONALITY

17. The Council and the General Board are further satisfied that the retention of a retirement age for University officers as proposed represents a proportionate means of achieving the objectives discussed above. The Council and the General Board consider the key elements of the proposals set out below to be material to this conclusion.

#### RECOMMENDATION

24. The Council and the General Board recommend:

That approval be given for maintaining the retirement age of all University officers (with exceptions as specified) at the end of the academical year in which they attain the age of 67 years.

12 December 2011

L. K. BORYSIEWICZ, *Vice-Chancellor*  
 DAVID ABULAFIA  
 N. BAMPOS  
 RICHARD BARNES  
 STEPHEN J. COWLEY  
 ATHENE DONALD  
 R. J. DOWLING

30 November 2011

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 H. A. CHASE  
 SARAH COAKLEY

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 CHRISTOPHER HUM  
 VANESSA V. LAWRENCE  
 MAVIS McDONALD

SUSAN OOSTHUIZEN  
 RACHAEL PADMAN  
 THOMAS PARRY-JONES  
 JOHN SHAKESHAFT  
 GERARD TULLY  
 MORGAN WILD  
 A. D. YATES

CHRISTOPHER CROW  
 SIMON FRANKLIN  
 ANDREW GAMBLE  
 C. A. GILLIGAN  
 DAVID GOOD

PETER HAYNES  
 RACHAEL PADMAN  
 J. RALLISON  
 MORGAN WILD

<sup>5</sup> The draft policy refers to subsidiary documentation which is intended in due course to be made available on the University website.

## Appendix 1

Table A shows the number of leavers by staff category and the percentage that left due to retirement in each of the last three academic years. It also indicates the number of vacancies filled in the staff category.

<sup>6</sup> The average of the number of new starters in the academic year and the academic year following it.

<sup>7</sup> The average or the number of new entrants in academic year onestablished capacity (e.g. Directors of Research).

Note: Variable hours ~~and~~ paid on a claims basis with no contractual working hours are excluded.

Table B shows the condor breakdown in 2011 within the different socio-economic strata.

Staff Group	Age band						Male 60+
	16-39	40-49	50-59	Male	Female	Male	
Established Academic	28% (68)	72% (175)	28% (135)	72% (339)	21% (94)	79% (363)	16% (47)
Established Academic-related	50% (81)	50% (80)	47% (105)	53% (117)	40% (95)	60% (143)	22% (20)
Unestablished Academic	34% (21)	66% (41)	59% (22)	41% (15)	53% (16)	47% (14)	33% (4)
Unestablished Academic-related	58% (187)	42% (138)	51% (96)	49% (92)	62% (80)	38% (50)	41% (12)
Research Assistant	43% (933)	57% (1216)	48% (234)	52% (253)	55% (95)	45% (79)	36% (32)
Administrative Assistant	66% (80)	34% (425)	61% (460)	39% (296)	62% (501)	38% (309)	53% (187)

Data is at 1 January 2011

Note: Variable hours employees (i.e. employees paid on a claims basis with no contractual working hours) are excluded.

## Appendix 2

Title	Retirement Policy (2011)
Sponsor	Indi Seehra, Director of Human Resources

### *Retirement Policy*

Policy Reference Number: retpol4

#### 1. Purpose

The purpose of this policy, which takes effect from 1 April 2012, is to provide a statement of the University's approach to employee retirement. The University believes that a clear policy will assist employees in planning for their retirement, or for an extension of their working lives, and will allow for effective succession and activity planning within the University.

#### 2. Contents

- Purpose
- Contents
- Eligibility
- Statement of Policy
- Procedure for University officers<sup>1</sup>
- Procedure for Assistant Staff, Contract Research Staff and Unestablished Academic and Unestablished Academic-related Staff<sup>2</sup>
- Roles and responsibilities
- Applicability of other policies and procedures
- Constitution of the Central Approval Committee
- Appeals procedure
- Reporting
- Documentation
- Policy Ownership and Status
- Timeline

#### 3. Eligibility

This policy applies to all University employees (i.e. those who hold a contract of employment with "The Chancellor, Masters, and Scholars of the University of Cambridge"), with the exception of employees working for Cambridge University Press and Cambridge Assessment.

#### 4. Statement of Policy

4.1 The University aspires to the highest standards of teaching, research, and administration. It is important that in striving to achieve these aims institutions can plan their staffing structures to allow maximum effectiveness across these activities, whilst considering the wishes of individual employees in relation to their workplans.

The introduction of this policy follows consultation with employees, institutions and trade unions following the abolition of the default retirement age from 1 October 2011. The terms of the policy are set out below.

4.2 For University officers,<sup>3</sup> the University operates a retirement age which is at the end of the academical year in which the University officer reaches the age of 67. The University considers that this is important to ensure inter-generational fairness, to complement rights of academic freedom and autonomy, to ensure that the University continues to work towards a diverse workforce and to refresh the academy in providing opportunities for career development to those at an early stage of their academic career. The options available to University officers on reaching the retirement age are set out in more detail in section 5.

4.3 The University does not operate a retirement age for assistant staff, contract research staff, and unestablished academic and unestablished academic-related staff.<sup>4</sup>

#### 5. Procedure for University officers

5.1 The Head of Institution will write to an employee at the beginning of the academical year, two years before he/she reaches the retirement age, setting out the options available to her/him. The HR Division will supply the Head of Institution with an annual report of the names of these employees to facilitate these communications.

<sup>1</sup> This category of staff is defined in Statute D, I, 1.

<sup>2</sup> Unestablished academic and unestablished academic-related staff are academic and academic-related staff who are not University officers.

<sup>3</sup> Other than the Chancellor, the High Steward, the Deputy High Steward and the Commissary (who are excluded from Statute D, I, 11).

<sup>4</sup> Where the employment of a University officer is extended beyond the retirement age, that employment will be in a fixed-term capacity and the individual will move from an established to an unestablished position. However, the University may continue to rely on retirement as a reason for ending the employment relationship at the end of this extended period of employment, including where there have been successive extensions.

5.2 The options open to the employee at this stage are as follows:

- to retire at the retirement age (or earlier subject to giving notice);
- to retire at the retirement age and apply for a Voluntary Research Agreement in accordance with the applicable procedures;
- to request continuation of his/her employment in an unestablished capacity on a fixed term basis, full or part time; or
- to apply for flexible retirement, working reduced hours and drawing part of her/his pension for a period before full retirement.

University officers are currently required to vacate their offices at the retirement age under the terms of Statute D, I, 11. Any extension of employment will therefore be on an unestablished basis.

The Head of Institution will invite the University officer to a discussion, taking place as part of the normal process of regular reviews which occur under the Staff Review and Development Scheme, to discuss future plans. A record should be made of the discussion using form RP3.

#### *5.2.1 Retiring at or before the retirement age*

If a University officer intends to retire before the retirement age he/she should complete the Intention to Retire Form (RP1) and submit this to her/his Head of Institution to advise the University of her/his planned retirement. This should be submitted no later than three months before the intended retirement date.<sup>5</sup>

If a University officer intends to retire at the retirement age, this is the default position and accordingly he/she need not take any steps to notify the University that this is the case, other than indicating this intention in the discussion.

If a University officer wishes to retire before Pensionable Age,<sup>6</sup> he/she needs to seek the permission of the University to do so by writing to the Academic Secretary, in addition to discussing her/his plans with the Head of Institution.

#### *5.2.2 Voluntary Research Agreement (“VRA”)*

This route enables University officers to retire but in exceptional circumstances to continue in active research in a voluntary unpaid capacity after retirement. The award of a VRA is normally linked to the confirmation and duration of a personal research grant. Applications for a VRA should be made on the relevant application form (RETAF3), where possible by 31 December, 21 months before the retirement age. The terms of a VRA and the approval procedure are set out at <http://www.admin.cam.ac.uk/offices/hr/policy/retirement/research>.

#### *5.2.3 Continuation of employment for a fixed period*

If a University officer wishes to continue working beyond the retirement age for a fixed period, he/she should submit a request for an extension to her/his Head of Institution by 31 December, 21 months before the retirement age, using the Request to Continue Working Beyond the Retirement Age Form (RP2e), indicating (i) the fixed period for which he/she wishes to continue to work and (ii) the reasons why he/she wishes to be considered for extended employment.

The Head of Institution will meet with her/him to discuss the details of his/her request. The request will be considered against the criteria set out at section 5.2.6 and having regard to the University’s guidance on fixed-term contracts, including the need for such contracts to be objectively justified. The guidance includes examples of objective justifications, which can be found at <http://www.admin.cam.ac.uk/offices/hr/policy/fixed/policy.html#justification>. Following consideration of the request, the Head of Institution will indicate whether the Institution will support it.

If the Institution is supportive of the request, the Head of Institution will make a recommendation, via the applicable School, to the Central Approval Committee (see section 9 below) by 28 February, 19 months before the retirement age, and the individual will be advised of the outcome in writing and will be provided with written reasons for the decision.

Where the request is approved, the extended period of employment will be in an unestablished capacity. A new contract of employment will be issued reflecting the title and terms of the new fixed-term appointment. The new contract end date will be the individual’s extended employment end date. During the extended working period, the Staff Review and Development Scheme will continue to operate and Heads of Institutions should meet annually with members of staff whose employment had been extended to discuss their ongoing plans. The meetings will allow a discussion of the individual’s wishes together with the institution’s plans, including potential variations in existing arrangements, and enable due process in advance of the extended employment end date.

#### *5.2.4 Flexible retirement (working beyond the retirement age)*

An employee may wish to continue working after the retirement age but in a part-time capacity before retiring fully. The terms of the USS allow a scheme member to draw part of her/his pension whilst continuing to work and receive a part-time salary. The minimum reduction in working time under this arrangement is 20% and the maximum pension that can be drawn is 80%. An employee wishing to take advantage of the flexible retirement option should first seek guidance about the terms of the scheme from the University Pensions Team.

If he/she then wishes to make a formal request for flexible working, he/she should complete form RP2f setting out the proposed new working pattern and submit this to the Head of Institution for consideration.

The Head of Institution will meet with the employee to discuss the request which will be considered against the criteria set out at section 5.2.6 below and having regard to the University’s guidance on fixed-term contracts, including the need for such contracts to be objectively justified. The Head of Institution will make a recommendation, via the applicable School, to the Central Approval Committee. The employee will be notified of the decision in writing and will be provided with written reasons for the decision.

<sup>5</sup> Following the discussion with the Head of Institution all necessary steps to action the retirement will be taken.

<sup>6</sup> Pensionable Age – the age at which a member of the Universities Superannuation Scheme (“the USS”), the Contributory Pension Scheme (“the CPS”) or the NHS Pension Scheme, as applicable, becomes entitled to access the scheme in question without an actuarial reduction.

University officers whose request is approved will receive a new unestablished, fixed term contract reflecting the revised working hours, and the contract end date will be the individual's extended employment end date. During the extended working period, the Staff Review and Development Scheme will continue to operate and Heads of Institutions should meet annually with members of staff whose employment had been extended to discuss their ongoing plans. The meetings will allow a discussion of the individual's wishes together with the Institution's plans, including potential variations in existing arrangements, and enable due process in advance of the extended employment end date.

#### *5.2.5 Flexible retirement (reducing working hours prior to retirement)*

Where an individual wishes to access a portion of her/his pension benefits whilst continuing to work in a reduced capacity prior to reaching the retirement age he/she can make a request for flexible retirement. Where the period of flexible working requested will not extend beyond the retirement age, agreement can be reached locally with the Head of Institution and with the approval of the relevant Faculty Board where appropriate. The request will not need to be considered by the Central Approval Committee since it does not involve an extension of employment.

The employee should use form FLEXAF to make the request to her/his Head of Institution. He/she will be invited to meet with the Head of Institution to discuss her/his request. The criteria against which the request will be determined are set out in the University's Flexible Working Policy (see <http://www.admin.cam.ac.uk/offices/hr/policy/flexible.html>). The Head of Institution will advise her/him in writing of the outcome of the request. If the request is approved the employee will receive a letter confirming that he/she has been granted leave to work part-time and setting out the new working hours.

However if part of the period of flexible working extends beyond the retirement age, or the request is made after this point, it will need to be considered by the Central Approval Committee in accordance with the procedure in section 5.2.4 above.

#### *5.2.6 Criteria for evaluating requests to work beyond the retirement age*

The following criteria are provided to allow consistent evaluation of requests from employees to work beyond the retirement age. Where a request to continue working is made by a University officer, he/she should set out the reasons why he/she wishes to apply for extended employment in form RP2e. The criteria should be taken into account by the Head of Institution when making a recommendation to the Central Approval Committee, and by that committee when determining the final outcome of the request. **In all cases, the criteria should be taken into account, subject to the overriding principle that employment will not be continued unless the individual will make an exceptional contribution to the University in the future, such that her or his continued employment will generate a net benefit to the University.**

- Would the individual's contribution be unusually difficult to replace given her/his particular skills, knowledge or experience and/or the availability of similar skills and experience from the employment market?
- Would the extended employment compared with alternative options fit more appropriately with the future academic and business needs and plans of the Department, Faculty or Division over the proposed period (for example where there is a desire to develop new teaching or research initiatives)?
- What is the likely impact of the extended employment compared with alternative options on the quality of work of the Institution; for example on its ability to respond to student needs, to meet research aims, or to provide professional and administrative services of the highest quality?
- How would any financial commitments or benefits, which would accrue from an extended employment over the period proposed, compare with those which might accrue from alternative options, e.g. the costs and timescales of recruitment and training? What is the impact on current or future funding?
- What is the likely impact of extended employment compared with alternative options on opportunities for career development and succession planning to renew the academy through promotion, bearing in mind turnover in the Institution?
- What is the likely impact of extended employment compared with alternative options on diversity trends, including the distribution of ages among staff within the work team and/or Institution?
- In the case of clinical staff, is the relevant NHS Trust willing to renew the individual's honorary contract?
- Is the duration of the proposed extension of employment and the individual's preference for full or part-time employment in the interests of the University?

### **6. Procedure for Assistant Staff, Contract Research Staff, and Unestablished Academic and Unestablished Academic-related Staff**

6.1 Whilst there is no retirement age for these staff groups, the University wishes to set up a procedure for employees to be able to consider their choices at or about the time when they become entitled to draw their occupational pension in full.

For planning purposes, it is assumed that whenever the employee should choose to retire her/his retirement date would be 30 September, i.e. the end of the academical year in which he/she wishes to retire. To assist with operational planning, employees should inform their Head of Institution as soon as possible if it is their intention to retire on a different date.

The Head of Institution will write to staff two years before they reach the age of 65 (which for most staff is the age when they may access their occupational pension without an actuarial reduction), advising them of their options.

These options are:

- to retire
- to continue working on the same basis
- to continue working with a reduction in hours
- to continue working with a modification of duties/in a different role
- to apply for flexible retirement, working reduced hours and drawing part pension for a period before full retirement (USS members only).

6.2. Two years prior to an employee reaching the age of 65, the Head of Institution will write to the employee inviting her/him to a discussion as part of the normal process of regular reviews which occur under the Staff Review and Development Scheme.

Such discussions are an informal opportunity for both Heads of Institutions and employees to plan jointly for the future (and enable Heads of Institutions to establish if and when an individual is thinking about retiring). The outcome of a discussion should be recorded briefly on form RP3. Heads of Institutions, or their deputies, are encouraged to undertake this review annually, or more frequently where the individual requests it, or where it is required, irrespective of age. The aim of the regular review meetings is to maintain a dialogue about the individual's plans in a supportive manner.

Where an individual intends to continue in post, he/she should inform the Head of Institution of this intention at the discussion.

If an employee wishes to take on a different role within the University at any stage, he/she will be entitled to apply for that position in the normal way.

If an employee intends to continue working but wishes to request a change in hours or duties, a FLEXAF form should be completed and submitted to the Head of Institution in advance of the relevant review meeting. Requests will be considered under the criteria set out in the University's Flexible Working Policy (see <http://www.admin.cam.ac.uk/offices/hr/policy/pt.html>). Requests for modifications of hours or duties will be accepted providing this is in accordance with the needs of the Institution.

6.3 An employee can declare her/his intention to retire at any time by completing the Intention to Retire Form (RP1) and by providing the appropriate period of notice of her/his retirement. If he/she chooses to retire earlier than Pensionable Age, and is a member of the USS or CPS, her/his pension entitlements may be actuarially reduced in line with the terms of the scheme.

All members of staff have the opportunity to attend a planning for retirement course during the two-year period before they reach the age of 65. Details of this course are available on the HR Division website at <http://www.training.cam.ac.uk/cppd/event/219622>.

## **7. Roles and responsibilities**

Employees are responsible for:

- keeping the Head of Institution informed of their plans and attending related meetings
- completing form RP1 to advise the Head of Institution of their retirement date (other than in the case of a University officer intending to retire at the retirement age)
- completing form RP2e to request an extension beyond the retirement age (University officers only).

Heads of Institutions are responsible for:

- writing to employees two years before they reach their retirement age or the age of 65 (as the case may be) to advise them of their options
- meeting with individual employees to discuss the options
- seeking Faculty or School-level approval of the Department's recommendation in line with local arrangements
- making a written recommendation to the Central Approval Committee for each University officer's request to continue in employment beyond the retirement age when this is supported by the Institution based on the criteria in section 5.2.6
- undertaking succession planning within the Institution in light of the information about employee retirement plans
- carrying out regular staff review and development meetings with all employees, including those in extended employment.

These duties may be delegated within the Institution.

Departmental Administrators are responsible for:

- advising HR Recruitment Administration of any changes to working patterns that are agreed, by completion of a CHRIS 50
- supporting the discussions between Heads of Institutions and individuals to discuss requests for extension and/or variation in hours/duties.

HR Business Managers are responsible for:

- providing Heads of Institutions with an annual report of all employees reaching the retirement age and the age of 65 in a given year
- providing advice and guidance on the consideration of requests
- communicating the outcome of requests considered by the Central Approval Committee to the employee and the Institution.

Heads of Schools (or equivalent) are responsible for:

- monitoring information about retirements and extensions supplied by Heads of Institutions to ensure adequate succession planning is taking place across the School in line with the School's strategic plans.

## **8. Applicability of other policies and procedures**

### **8.1 Discussions**

Regular discussions form part of the University's Staff Review and Development Scheme and should be conducted with all employees. Such discussions provide an opportunity for the Head of Institution to ask open questions about an employee's aims, aspirations, and plans for the short, medium, and long term and to discuss the individual's performance,

developmental, and training needs. These discussions are informal and confidential and employees should be encouraged to participate fully. A record of the discussion should be made using form RP3.

Heads of Institutions or their deputies are encouraged to undertake discussions annually as part of the Staff Review and Development Scheme (or more frequently where an individual requests it or where it is required), to enable both the Institution and the employee to plan jointly for the future.

The Head of Institution should also discuss with the employee the Institution's future plans and future staffing needs, so that employees are aware of the Institution's future needs.

For more information please see the Staff Review and Development Scheme: <http://www.admin.cam.ac.uk/offices/hr/policy/appraisal>.

## 8.2 Performance Review

The staff review and development process provides a regular opportunity for a two-way review of work progress and a discussion of development needs. It also provides a forum for a discussion of any difficulties or obstacles to an employee's effective performance in the role. Where there are more immediate or significant concerns about an employee's performance or capability, these should be addressed separately through a process of systematic performance review. Institutions are advised to speak to their HR School team for further advice when managing specific cases of underperformance.

## 9. Constitution of the Central Approval Committee

Pro-Vice-Chancellor Institutional Affairs (Chairman)

Director of Human Resources (Secretary)

Two persons nominated by the General Board, including a Head of School

A person nominated by the University Council

Academic Secretary

Registry

The Committee will meet once a year in the Easter Term to consider all cases for extensions to take effect at the end of the following academical year. Thus, requests will be considered and individuals notified of the outcome approximately 15 months before they reach the retirement age.

The Committee will decide whether or not to approve individual requests supported by Schools for extended employment beyond the retirement age.

## 10. Appeals procedure

Where a University officer is dissatisfied with the outcome of a request for extended employment or to vary their hours beyond the retirement age, he/she will have a right of appeal. Any appeal should be made in writing to the Director of Human Resources within 14 days of the outcome of the request being communicated to the employee and should set out the grounds of appeal.

Appeals will be heard by an Appeal Committee appointed by the Council consisting of a Chairman and two University officers. The Appeal Committee will meet within 14 days of its establishment to hear the appeal, or as soon as is reasonably practicable. The appeal will be determined following an oral hearing attended by the appellant and the responsible person. The responsible person shall be the Head of Institution, Head of Division or their nominated deputy. The appellant and the responsible person will be entitled to make a statement and to address the Appeal Committee.

Following the hearing of the appeal, the Appeal Committee will consider the facts of the case and may allow or dismiss an appeal, in whole or in part. The decision of the Appeal Committee will be notified to the appellant and recorded in a document signed by the Chairman, giving the reasons for this decision. A confirmatory letter will be sent to the appellant within seven days.

The Appeal Committee may decide to vary the above procedure as it deems appropriate.

## 11. Reporting

The operation of this policy and the maintenance of a retirement age will be kept under review. The Human Resources (HR) Committee may amend this policy as appropriate to ensure its compliance with legislation and to maintain an effective set of procedures. A report of the numbers of retirements and requests for extended employment beyond the retirement age will be received by the HR Committee each academical year.

## 12. Documentation (not included in this draft)

Intention to retire (RP1)

Request to continue working beyond the retirement age (RP2e) (University officers)

Record of discussions (RP3)

Request to work part time (FLEXAF)

Request to take flexible retirement (RP2f)

Request for a Voluntary Research Agreement (RETAf3)

### *Associated guidance*

VRA Policy and Procedure

Guidance on the use of fixed term contracts

Flexible Working Policy

Staff Review and Development procedure and guidance

ACAS Guide to Conducting Workplace Discussions

ACAS Guide to working without the default retirement age

### 13. Policy Ownership and Status

Version	Summary of amendment	Date
RP v0.2	second draft	27 June 2011
RP v0.3		13 Oct 2011
RP v0.4		04 Nov 2011
RP v0.5		08 Nov 2011
RP v0.6		25 Nov 2011
RP v0.7		01 Dec 2011

*Timeline for University officers*

October	HR Division to provide the Heads of Institutions with lists of employees who will reach the retirement age in two years' time.
By 31 October	Two years prior to the retirement age, the Head of Institution to write to the University officer setting out the options available at the retirement age.
By 31 December	A discussion will have taken place to discuss future plans.
	Applications for VRA (form RETAF3), requests to continue working beyond the retirement age (form RP2e), and requests for flexible retirement (form RP2f) to be completed.
By 28 February	The Head of Institution will make a recommendation (if appropriate) to the Central Approval Committee.
By 30 June	Central Approval Committee meet and individuals to be informed of outcome.
By 15 July	Appeal to have been lodged.
By 30 September	Appeal hearing to have taken place and outcome of appeal communicated.
30 September (following year)	Retirement at end of academical year in which a University officer reaches 67.

## GRACES

### Graces submitted to the Regent House on 14 December 2011

The Council submits the following Graces to the Regent House. These Graces, unless they are withdrawn or a ballot is requested in accordance with the regulations for Graces of the Regent House (*Statutes and Ordinances*, p. 107), will be deemed to have been approved at 4 p.m. on Friday, 23 December 2011.

**1.** That the recommendations in paragraph 13 of the Report of the Council, dated 21 November 2011, on the construction of a new building for research in Experimental Astrophysics (*Reporter*, 2011–12, p. 210) be approved.

**2.** That certain regulations be amended as follows:<sup>1</sup>

A. The regulations for the Gordon Duff Fund and Prize (*Statutes and Ordinances*, p. 776).

Regulations 5 and 7.

By replacing the reference to the Registry in each case by reference to the Deputy Librarian of the University Library.

B. The regulations for the Arnold McNair Scholarship Fund (*Statutes and Ordinances*, p. 839)

Regulations 3 and 5.

On the recommendation of the Whewell Professor of International Law, and with the concurrence of the Faculty Board of Law, by replacing the reference to the Registry in line 1 in each case by reference to the Secretary of the Faculty Board of Law.

C. The regulations for the Yorke Prizes (*Statutes and Ordinances*, p. 966)

Regulation 4.

By replacing in line 1 the reference to the Registry by reference to the Secretary of the Faculty Board of Law.

<sup>1</sup> The regulations have been amended to reflect the current administrative arrangements.

## REPORT OF DISCUSSION

### Tuesday, 6 December 2011

A Discussion was held in the Senate-House. Deputy Vice-Chancellor Dr Kate Pretty was presiding, with the Registrar's deputy, the Junior Proctor, a Pro-Proctor, and five other persons present.

The following Report was discussed:

***Report of the Council, dated 21 November 2011, on the construction of a new building for research in Experimental Astrophysics (Reporter, 2011–12, p. 210)***

Professor W. J. STIRLING (Head of the Cavendish Laboratory):

Madam Deputy Vice-Chancellor, as Head of the Cavendish Laboratory I am delighted that the scheme to construct the new building for Experimental Astrophysics has reached this advanced stage. The Department is very grateful to all those within the wider University who have contributed to the success of the project so far, including our collaborators in the Institute of Astronomy and most especially our donor.

The building will provide an excellent centre for new research and for new ways of doing research in the rapidly developing field of astrophysics. The co-location of research activities and facilities will provide a clear focus for this scientific effort.

Modern astrophysics and cosmology is based around large collaborative partnerships, often international in nature, as a means of developing complex technologies to explore and understand the Universe in unprecedented detail.

It has long been a strategic aim of the University's School of the Physical Sciences to facilitate greater integration of its research in astrophysics, astronomy, and cosmology as a means of enhancing Cambridge's participation and influence in large international research projects. Greater integration of the strengths across the Cavendish Laboratory and the Institute of Astronomy, from detector development to full science exploitation and interpretation, is vital in order for Cambridge to maintain pre-eminence in the field in the UK, and integral to the UK's leadership of European astrophysics. Significant

gains are possible in areas such as instrumentation development and the analysis of astronomical datasets, where there is expertise both within the Institute of Astronomy and the Cavendish Laboratory.

Integration also has significant potential benefits for undergraduate and postgraduate education, and for outreach.

In 2009, thanks to the generous support of the Kavli Foundation, the University opened the Kavli Institute for Cosmology on the Institute of Astronomy site; a major first step towards achieving the School's strategic goal. Success is already evident with staff members currently interpreting the superb data acquired by the European Space Agency's Planck satellite, which should improve by an order of magnitude our knowledge of conditions in the early Universe, cosmological parameters, and dark energy.

In order to realize the School's strategic aim, however, a new building is required to house the remainder of Cambridge's experimental astrophysicists on the Institute of Astronomy site, to provide additional space for new developments. This will significantly further the co-location of research in astrophysics, astronomy, and cosmology, and will provide more opportunities for great scientific advances through close integration of science and technology teams.

With space to host international conferences and visitors, funded from existing research grants and endowments, the building will establish a global reputation as a world-class centre of research excellence in all aspects of astrophysics and cosmology. This will enhance Cambridge's ability to attract the very best scholars and young scientists from around the world. With the overriding aim of maintaining a strong, diverse, and international talent-pool, new appointments of leading academics will continue to strengthen the research effort and allow the Departments to adapt to emerging areas of research. For example, Professor Roberto Maiolino has recently been appointed to the Chair of Experimental Astrophysics and will join the group in Cambridge in 2012, bringing new scientific and technical opportunities in the areas of Millimetre-Infrared-Optical Astronomy and Galaxy Evolution.

This exciting project will bring enormous benefits to research, teaching, and outreach in astrophysics, astronomy, and cosmology and we warmly commend this Report to the University.

**COLLEGE NOTICES****Elections****St Edmund's College**

Elected Chair of the Von Hügel Institute with effect from 1 October 2011:

Professor John Loughlin, *Officier dans l'Ordre des Palmes Académiques*, B.A. (Hons), Ph.D., E.U.I., Florence, Ph.D., h.c. Umeå, Sweden, F.R.S.A., F.R.Hist, Ac.S.S.

Elected into a Fellowship in Class A with effect from 1 October 2011:

Dr Shahzad Ansari, M.Phil., Ph.D., ED.

Elected into a Bye Fellowship with effect from 1 October 2011:

Rev Dr Rodney Holder, M.A., T, D.Phil., D.Min., Oxon.

Elected into a Visiting Fellowship from 24 August 2011 to 20 August 2012:

Dr Christopher Carilli, B.A., Penn, D.Phil., MIT, Director of Office of Scientific and Academic Affairs, NRAO.

Elected into a Visiting Fellowship from 1 February to 30 July 2012:

Professor Gennaro Auletta, Ph.D., *La Sapienza*, Aggregate Professor, Pontifical Gregorian University, Rome, Researcher, University of Cassino.

**Vacancies**

*Darwin College*: Adrian Research Fellowship in International Politics; closing date: 6 February 2012; further particulars: <http://dcsa.dar.cam.ac.uk/content/adrian-research-fellowship-international-politics>

Microsoft Research Fellowship; closing date: 17 February 2012, further particulars: <http://dcsa.dar.cam.ac.uk/content/microsoft-research-fellowship>

**SOCIETIES, ETC.****Antiquarian Society**

The next Society lecture will take place on Monday, 9 January 2012, at 6 p.m. in the Law Faculty Building, West Road. Further details are available at <http://www.camantsoc.org/events.html>.

**EXTERNAL NOTICES****Oxford Notices**

*Balliol College*: Two Non-Stipendiary Junior Research Fellowships (one science, one humanities); guaranteed funding for three years required; limited paid tutorial teaching available, with accommodation and allowances; closing date: 13 January 2012; further particulars: <http://www.balliol.ox.ac.uk/vacancies/vacancies>

*Jesus College*: Non-Stipendiary Junior Research Fellowship in Economics; £2,183 a year salary enhancement; closing date: 3 February 2012; further particulars: <http://www.jesus.ox.ac.uk>

*Oxford Centre for Hebrew and Jewish Studies, in association with St Peter's College*: Albert and Rachel Lehmann Junior Research Fellowship in Jewish History and Culture; tenure: two years from September 2012; salary: £29,099; closing date: 15 January 2012; further particulars: <http://www.ochjs.ac.uk> or [enquiries@ochjs.ac.uk](mailto:enquiries@ochjs.ac.uk)

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