

Lancaster University
Department of Mathematics and Statistics

1. Discipline Profile for Statistics

This discipline profile outlines the characteristics and achievements typically expected of a Lecturer in Statistics in order to complete probation, for promotion from Lecturer A to Lecturer B and for promotion to Senior Lecturer. (A separate discipline profile outlines similar discipline norms pertaining to a Lecturer in Mathematics.) Cases for completion of probation and for promotion are initiated or considered by the Head of Department in consultation with the heads of the separate Sections of the Department. Further details of the University's promotion procedures may be found on the Personnel Services web site at <http://www.lancs.ac.uk/users/personnel/prpapers.htm>.

2. Research and Publications in Statistics

The Statistics discipline at Lancaster includes a wide spectrum of theoretical and applied work. Statistical and probabilistic theory can be highly mathematical and is conducted within the discipline, whereas applied work typically involves collaboration with non-statisticians across a wide range of disciplines. Joint publication of research results, either by two or three statisticians or as a member of a multi-disciplinary team, is the norm. Theoretical and applied work both make extensive use of advanced computational tools, in research and in teaching. Software development, if well-documented and widely distributed, is considered as a valuable research output. Publication in the form of refereed journal articles. Papers in conference proceedings or other compilations are usually of secondary importance. Books which synthesise recent research findings can be highly regarded, but would still be secondary to the original source papers. A mixture of theory/methodology and application papers is common, although the balance varies strongly between individuals. Applied work typically will be co-authored, and often appears in non-statistical journals. The level of statistical input to such papers can vary considerably. The best applied work can appear in both statistical and subject-matter journals.

Secondary research indicators include:

- Track-record in research grant activity and in research supervision. PhD students and research associates are accorded equal status.
- Evidence of national or international standing: invited talks and courses, editorial positions or committee work for national societies (such as Royal Statistical Society, Biometric Society) or Government bodies, membership of national and international Statistics research panels such as the EPSRC Mathematics College, or by services to mathematical and statistical education such as serving on review panels and external examining.
- Evidence of research initiatives, for instance involvement in cross-disciplinary research, and stimulating departmental activities such as specialised research seminars and reading groups.

Statistical Consultancy can be a major activity for some staff. Evidence should be presented through testimonials, evidence of joint publication and client feedback. A successful consultant will be able to relate to clients from a wide range of disciplines, to be able to listen and direct, and to choose appropriate statistical methodology for the nature of the problem and the skills of the client. Some consultancy work should lead to joint publication, and consultants should negotiate such recognition with clients.

3. Promotion

3.1 Probation

The following requirements would typically apply to a junior lecturer for whom this was the first Appointment:

(i) Research and publication

Significant progress in developing research. This might include (a) successful completion of a PhD, (b) articles in refereed journals, (c) evidence of a clear plan for future research (d) active participation in appropriate conferences.

(ii) Teaching

A satisfactory teaching record. This might include (a) carrying a lecturing load gradually increasing to around the departmental average, (b) involvement in course (module) development, (c) satisfactory feedback from students and evidence of ability to respond to points raised.

(iii) Administration

A satisfactory performance in administration.

(iv) General

In addition, it would be hoped that the member of staff would have demonstrated himself or herself to be actively and willingly participating in Departmental activities, demonstrating co-operativeness and initiative.

3.2 Promotion from Lecturer A to Lecturer B

(i) Research

There should be evidence of sustained publication output in refereed journals at a level worthy of RAE inclusion. There should be evidence of research independence and some supervisory experience.

(ii) Teaching.

There should be evidence of commitment to course development and the ability to teach a range of material successfully. A good teaching record might include (a) carrying a full teaching load, (b) active participation in the development of new courses, (c) good feedback from students, (d) good course review and peer observation reports.

(iii) Administration.

Carrying a significant administrative load with evidence of ability to take on major administrative tasks.

3.3 Promotion to Senior Lecturer

(i) Research.

A research-led case would require evidence of a research reputation of national standing within their research specialisation. Typically around 15 papers at a rate of at least 2 per year, although for theoretical work somewhat fewer, but typically in highly rated statistical and/or probabilistic journals, would be sufficient. For applied work the strongest indicators of statistical quality would be selection for inclusion in the Statistics RAE return together with evidence of leadership in research collaborations and publication in both substantive and statistical journals. Typically two successfully completed supervisions, of Ph.D students and/or research associates, typically together with co-investigator status of an RA-employing research grant.

(ii) Teaching.

A teaching-led case would require evidence of effective and influential leadership in a number of aspects of course development and administration, and evidence of high quality and versatile teaching.

(iii) Administration.

Evidence of excellence in administration might typically include: (a) successfully taking a leading administrative role within the Department, for example as Head of Teaching; (b) successfully playing a major administrative role either at faculty or university level.

4. Summary of Levels 1-4 in teaching, research and administration

The University Guidelines are generally appropriate in the case of Statistics, with the following changes of emphasis. The level 1, 2 indicators for Teaching need not “incorporate recent research material” nor make “use of e-learning”. The level 3 indicators for Administration need not include a “record of sustained success in business generation”.

TEACHING

Level 1: Demonstrates a willingness to teach courses at undergraduate level. Demonstrates competence in teaching as measured by course reviews and peer observation reports. Evidence of ability to respond to reviews and feedback.

Level 2: The above and in addition: Actively involved in course development. Obtains good course reviews and peer observation reports.

Level 3: The above and in addition: Obtains excellent course reviews and peer observation reports. Innovative in terms of teaching and assessment. Acts as external examiner at high quality universities. Advises other institutions on course/degree programmes.

Level 4: The above and in addition: Provides leadership in terms of teaching within the department. May publish on teaching, gain research awards, develop and market teaching materials. May design and implement new degree schemes.

RESEARCH

Level 1: Has clear research programme. Is actively engaged in research. Is publishing in refereed research journals. Presents papers and participates in national conferences.

Level 2: The above and in addition: Has been successful in obtaining some research funding.

Level 3: The above and in addition: Has a consistent publication output. Is a nationally known figure in the field. May be editor or editorial advisor for a research journal or conference proceedings.

Level 4: Internationally known and respected figure in the field. Has published high quality articles over a long period. Frequently invited to major conferences. May be involved as a leading figure in national and international research networks. May have made significant research contributions to several fields of mathematics.

ADMINISTRATION

Level 1: Willing to accept fair share of administrative tasks. Performs administrative tasks competently.

Level 2: The above and in addition: Has taken on significant administrative roles in the department (such as Exams Officer, Part 2 Tutor) and has done the job well. Represents the department at Faculty/University level.

Level 3: The above and in addition: Has undertaken significant administrative roles over a considerable period and has been very effective in doing so.

Level 4: The above and in addition: Has given outstanding service to the Department over a number of years. Has been/is willing to be Head of Department and has/would do this job effectively.

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