

Graduate School of the Environment

Discipline Profiles

Overview

The Graduate School of the Environment (GSE) comprises staff from the natural and social sciences and humanities. Their formal education may have been in such areas as biology, geography (human and physical), geology, chemistry, chemical engineering, physics, economics, philosophy, environmental management, urban planning and landscape architecture. The fields of urban planning, land economics, and environmental management are represented by professional recognition and employment accumulated outside the University. Some academics will seek to retain high standing within their disciplines, others may find it difficult to align their array of expertise with a single discipline or profession. The GSE values and benefits from this diversity and regards it as fundamental to delivery of an excellent program. The School expects therefore that staff may develop roles that enable that diversity of experience and formal education to enrich, strengthen or advance the interests of the School.

The school aims to be the nation's leading postgraduate school in environmental management, noted for excellence in teaching, research and community service. Expectations upon staff are therefore high and workload commensurate with these expectations.

Because of the diversity of subjects offered and nature of postgraduate teaching, normally all full-time teaching staff will be appointed at Level B or higher so as to comply with the Position Classification Standards. Level A appointees will usually be research only staff, or teaching staff holding fractional appointments.

The school appoints several staff external to the University on fractional appointments to include professionally experienced personnel and cover essential teaching areas not able to be covered internally.

The school appoints staff to Level A research fellow positions instead of as research assistants on the HEW scale where possible.

Position classification standards

The requirements of the position classification standards are noted and the School recognises the criteria which distinguish all levels, namely research performance, contributions to and levels of responsibility in academic program development and levels of administrative responsibility. Community contributions are not distinguishing criteria, surprisingly. The GSE takes a different view.

Overview of promotion criteria

Disciplines vary in the standards required for promotion, e.g. the sciences expect higher numbers of publication than the social sciences. The differential is lower in the GSE than within the University at large. In other words the promotion should not only be seen as acceptable within the discipline recognising the contributions made but also by comparison with performance of other staff in the school.

The school has a strong research culture and all staff are expected to be active in research and scholarship which leads to publication.

Qualifications

Level A: An honours degree or relevant postgraduate qualification sometimes coupled with experience relevant to the duties required. ,

Level B: A research degree, preferably a PhD, is required for long term appointments, short term and fractional appointments may be based on demonstrated ability to perform tasks as may be evidenced from progress in research or professional standing.

Level C: A research degree, preferably a PhD, is required for long term appointments, short term and fractional appointments may be based on professional standing.

Level D: As for Level C

Level E: As for Level C

Teaching and Supervision

Average contact hours of staff are between 250 and 300 per annum, and 40-50 students require supervision spread over about 8 staff. Staff members may participate in up to five units per year and are usually responsible for at least two.

Teaching involves lecturing, tutoring, field and laboratory based teaching, group exercise work, postgraduate research and coursework supervision. Most teaching is postgraduate but some staff contribute to undergraduate units (3 units in 1998) and honours supervision.

Postgraduate units are mostly presented in the evening between 6 and 10 pm or in the field. Day offerings to postgraduate coursework students also exist for all core units.

Distance education is being considered.

Non-award course teaching is undertaken by staff, but given the high award teaching loads it is voluntary, not included in normal workload and should be considered as community service.

Excellence in teaching may be demonstrated by student evaluation, peer evaluation of course material. Scholarship, effective communication skills and intellectual challenge should characterise teaching performance. Innovation is encouraged. Professional relevance is essential. The quality of teaching is more important than the quantity, but a high teaching load arising out of necessity, new initiatives or commitment to program development should contribute to promotion.

Most staff members would have been involved in design and revision of units. Level B staff would be given the freedom and encouragement to do so. Staff able to team teach, and contribute beyond their main research interests and develop the academic program are especially valued.

Level A: Teaching expectations may range from occasional lectures and field sessions by research staff, and undergraduate tutoring to broader based teaching support for postgraduate units. The latter including the marking of major assignments is considered the higher level and more responsible duty. Post-doctoral staff may be associate supervisors of research degree students.

Level B: Will have responsibility for one or more units, usually postgraduate units, and share the teaching of other units. In the first few years of appointment their loads may be lower than average so as to enable them to develop research programs. Supervision of research degree candidates is expected.

Level C: Will have responsibility for one or more units, usually postgraduate units, and share the teaching of other units. Their teaching is expected to be done more efficiently than Level B staff. Responsibility for program delivery may be assigned to them, for example, oversight of research student programs and progress. Level C staff will usually supervise more research candidates than Level B staff.

Level D: In addition to the requirements of Level C, staff are expected to provide academic leadership in teaching by the develop of new programs, or take responsibility for such development where this is assigned to them. Fractional appointments may be made on the basis of professional standing.

Level E: In addition to the requirements of Level D, professors should bring international standing to the academic programs etc. or their contributions be distinguished by the quality and quantity of research supervision.

Scholarship and research

Research and scholarship can involve theoretical or experimental work in any environmental area. The mission of the school is "Finding solutions to environmental problems". The work may, but need not be interdisciplinary. Often research will have an applied or policy component but pure research relevant to the state of the environment is also encouraged.

The Graduate School of the Environment distinguishes between contract research and consulting. Contract research is highly regarded, consulting is supported especially where it provides professional experience that can contribute to teaching or research. Most activity undertaken through Macquarie Research Ltd is contract research. The school's research management plan seeks a balance between applied (often contract) and strategic research. Student participation in the research program of the School is emphasised, including publication. Some student publications may not carry their supervisor's name because of convention in the social science and humanities, whereas in the sciences, joint authorship may be common.

Length and frequency of publications vary according to disciplinary background and audience. Those from a natural science background tend to produce papers of several thousand words but only later in careers publish books. Research directed at government policy commonly takes the form of reports which may be published on two by the government agency.

The median rate of publication in the University and the field or discipline to which the person could be assigned may be used as a benchmark when assessing research performance. Joint authorship is common and encouraged particularly where it results from interdisciplinary research. Publications arising from postgraduate student work are likely to be co-authored by the supervisor. Some credit, for promotion purposes, may also be given to publications under the sole authorship of postgraduate students.

Level A: Expectations range from undertaking assigned research duties for junior research fellows to conduct of independent research by mainly teaching staff, or experienced Post-docs. All staff are expected to demonstrate a capacity for independent critical inquiry and be able to contribute to publications.

Level B: Are expected to devise and conduct research programs, publish and obtain competitive grants. Publication rates should approach median levels.

Level C: Are expected to perform the tasks specified for Level B but more successfully and productively or be directors of small research teams. Publication rates should equal or exceed median levels, and usually a person beginning at this level would have at least 20 substantive publications.

Level D: Are expected to perform the tasks specified for Level C but more successfully and productively or be directors of medium to large research teams. Publication rates should exceed median levels, and usually a person at this level would have at least 40 substantive publications and be widely recognise by academic, professional or industry groups for their expertise.

Level E: Are expected to be internationally recognise for their research, leaders of research programs involving other staff and students.

Contribution to the university and community

The GSE expects all staff to share in administrative duties and committee work within the School and in the University. Because of the size of the School the administrative duties of all members of staff are likely to be high compared with the University as a whole. Regular attendance and participation in all decision-making forums of the School is expected of all staff. In university committees, staff are expected to be knowledgeable, public spirited and effective.

Professional recognition

Professional activities are essential to the standing and development of the GSE. Staff may choose the degree to which they become involved. Valued activities include in an approximate order of priority are:

- * office-bearer of professional organisations.
- * membership of editorial committees or boards on journals.
- * invitations to referee papers for journals or applications for research grants.
- * advisory committees to government or other organisations.
- * conference participation, particularly by invitation.
- * participation as an expert witness in environmental enquiries.
- * requests for information from newspapers, radio and television.

Level A: Contribute to school administration, participate in non-award courses and professional organisations.

Level B: Contribute to school and university administration, participate and/or design non-award courses and professional organisations.

Level C: Substantial contributions to school and university administration including policy development, participate and/or design non-award courses and professional organisations, membership of advisory organisations for government and industry.

Level D: Substantial contributions to school and university administration including policy development, committee chair or convener, design and conduct of non-award courses, membership of and professional organisations, membership of senior advisory organisations for government and industry.

Level E: Leading contributions to school and university administration including academic program development, committee chair or convener, design and conduct of non-award courses and professional organisations, external reviewer of academic programs, membership of high level advisory organisations and inquiries for government and industry.

Note: this section has been carried over from the previous profiles and has not been substantially revised.

Staff will advance their prospects of promotion to Level B from Level A by one or more of the following:

- 1 for teaching support staff, by completing research training demonstrating teaching capabilities equal to Level 8 staff on the basis of student and staff review.
- 2 being influential or innovative in any form of research.
- 3 making useful contributions to their profession, e.g. through appointment to important advisory positions.

Staff will advance their prospects of promotion to Level C from Level B by one or more of the following:

- 1 by a sustained research program of three or more years and resulting in regular publications and/or external grants.

- 2 being influential or innovative in any form of research.
- 3 contributing to academic program development through team teaching, strengthening student research, new unit development or accepting responsibility for programs.
- 4 making useful contributions to their profession, e.g. through appointment to important advisory positions.
- 5 particularly good teaching performance.
- 6 accepting a large share of administration and executing it in an efficient, and conscientious manner.

Poor performance in teaching or administration will count against promotion.

Exceptional cases on any grounds may be supported by the School.

Staff will advance their prospects of promotion to Associate Professor by one or more of the following:

- 1 substantial productivity in relevant research - basic or applied including consultancies or contract research.
- 2 exercising leadership in academic program development.
- 3 excellent teaching performance.
- 4 influence or innovation in research recognise internationally.
- 5 making distinguished contributions to their profession, e.g. through appointment to important advisory position.
- 6 substantial contributions to University academic policy or administration.

Below university average performance in teaching, supervision or administration will count against promotion.

Exceptional cases on any grounds may be supported by the School.