

POSITION DESCRIPTION

Academic Positions

(In addition to the Position Classification Standards)

Position Title: Lecturer Mathematics
 Level: B
 Faculty/Division: Engineering and Information Sciences
 Department/Location: School of Mathematics and Applied Statistics (SMAS)

Primary Purpose of the Position:

This position will carry out teaching, research, governance and community outreach/professional service duties consistent with a Lecturer Level B position in the School of Mathematics and Applied Statistics (SMAS) at the University of Wollongong (UOW). Candidates' research interests must include nonlinear elliptic and/or parabolic partial differential equations, aligning with the research interests of Dr Liu. Priority will be given to suitably qualified candidates who can contribute to Dr Liu's research program title "Fully nonlinear partial differential equations in optimisation and applications".

Position Environment:

The SMAS is a vibrant and collegial community with a strong track record in research and teaching. The significance of the mathematical sciences to most of the major endeavours of the University is recognised and the SMAS is highly regarded within the University. There are 31 academics in the School of Mathematics and Applied Statistics (SMAS). Between them they hold 10 Australian Research Council Discovery Project grants that fund 8 postdoctoral staff. There are currently 41 PhD students in SMAS. Research in nonlinear partial differential equations includes optimal transport, curvature flow, calculus of variations and applications in finance and modelling. Collaborative work is expected and research expectations are high.

The School is home to a number of both general and vocational undergraduate degree programs including the BMath, BMathEd, BMathFin, and BMedMath. There are advanced degrees for high achievers and combined degrees. The BMathAdv attracts excellent students and incorporates research projects in later years. UOW prides itself on the quality of its teaching and this position will be expected to contribute positively to that endeavour.

Major Accountabilities/Responsibilities:

Responsibilities		Outcome	Office Use Only
1.	Carry out research in theoretical nonlinear partial differential equations	Publications, particularly in high quality international journals	
2.	Teach and supervise students	Preparation, delivery and assessment of classes. Graduation of project and higher degree research students	
3.	Contribute to the background knowledge-base of the school and publicise work at other institutions	Presentation of seminars at UOW and other institutions and conference presentations	
4.	Administration and university governance	Administrative and governance roles undertaken	
5.	Service activities	Contribution to outreach activities and professional service undertaken	

6.	Comply with the University's research reporting requirements	Publications logged on university database. Meet reporting requirements of research funding agencies.	
7.	Work collegially, including mentoring students and junior staff	Enhanced and collegial working environment	
8.	Supervisory roles: Communicate and consult with staff on workplace and staffing matters.	To foster direct relationships with staff and enhance engagement with the organisation.	Ongoing
9.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	
10.	Have OH&S responsibilities, accountabilities and authorities as outlined in the http://Staff.uow.edu.au/ohs/commitment/responsibilities/document	To ensure a safe working environment for self & others.	

Inherent Requirements:

This position description outlines the major accountabilities/responsibilities and the selection criteria against which you will be assessed as suitable for the position. As such there will be specific job requirements that we refer to as Inherent Requirements.

Inherent Requirements refer to your ability to:

- Perform the essential duties and functional requirements of the job;
- Meet the productivity and quality requirements of the position;
- Work effectively in the team or other type of work organisation concerned; and
- Do the job without undue risk to your own or others health, safety and welfare at work.

If you have any injuries, illness, disorder, impairment, condition or incapacity that may affect your ability to perform the inherent requirements of the position, we encourage you to discuss this with the University to assist in the process of identifying reasonable adjustments to enable you to perform the duties of the position. The University wants to place you in the best situation to use your skills effectively in the position you are applying for at the University.

Reporting Relationships:

Position Reports to:	Head of School, Professor Song-Ping Zhu
The position supervises the following positions:	N/A
Other Key Contacts:	

Key Relationships:

Contact/Organisation:

N/A

Purpose & Frequency of contact

Key Challenges:

1. To conduct original research of lasting significance and disseminate it
2. To teach and inspire students
3. To help maintain an enthusiastic and productive collegial environment
4. To serve the local and professional community

SELECTION CRITERIA - Knowledge & Skills:

Essential:

- A working knowledge of the theory of nonlinear elliptic and/or parabolic partial differential equations.
- The ability to work harmoniously and effectively as a member of a research team.
- The ability to complete research projects and write up the results in publishable form.
- The ability to teach across the undergraduate program in mathematics.

Desirable

- Familiarity with any of: optimal transportation, regularity theory for fully nonlinear elliptic or parabolic equations, Monge-Ampere type or Hessian type equations, calculus of variations.

SELECTION CRITERIA - Education & Experience:

Essential:

- A PhD or equivalent involving the theory of elliptic and/or parabolic nonlinear partial differential equations, or equivalent post-PhD experience.
- The ability to initiate projects and see them through to completion.
- Experience in writing up the results of mathematical research.
- Teaching experience and demonstrated competence.

Desirable:

- Experience in applying for competitive funding.
- Evidence of evaluation of tertiary teaching performance and/or tertiary teaching qualifications.
- Experience in supervising undergraduate or higher degree research students.

Personal Attributes:

The appointee will be expected to work as an integral part of a team. This will require good interpersonal skills, and a willingness to share ideas and experiences.

Special Job Requirements:

None

Approval:

Approved by Head of Unit: _____

Date: _____

Approved by Human Resources: _____

Date: _____

POSITION CLASSIFICATION STANDARD - Teaching and Research

Level: B
Title: Lecturer

Description

A position classification standard describes the broad categories of responsibility attached to academic staff at different levels. The standards are not exhaustive of all tasks in academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. **Therefore the standards should not be applied mechanistically. Quality of performance is the principal factor governing level of appointment of individuals, and a broadly-worded skill base is set out for each level.**

All levels of academic staff can expect to make a contribution to a diversity of functions within their institutions. Such functions include teaching research participation in professional activities and participation in the academic planning and governance of the institution. The balance of functions will vary according to level and position and over time.

- General Standard
- Specific Duties
- Skill Base

General Standard

A Level B academic is expected to make contributions to the teaching effort of the institution and to carry out activities to maintain and develop her/his scholarly, research and/or professional activities relevant to the profession or discipline.

Specific Duties

Specific duties required of a Level B academic may include

- The conduct of tutorials, practical classes, demonstrations, workshops, student field excursions, clinical sessions and studio sessions.
- Initiation and development of subject material.
- Acting as subject coordinators.
- The preparation and delivery of lectures and seminars.
- Supervision of the program of study of honours students or of postgraduate students engaged in course work.
- Supervision of major honours or postgraduate research projects.
- The conduct of research.
- Involvement in professional activity.
- Development of course material with appropriate advice from and support of more senior staff
- Marking and assessment.
- Consultation with students.
- A range of administrative functions the majority of which are connected with the subjects in which the academic teaches.
- Attendance at departmental and/or faculty meetings and/or membership of a number of committees.

Skill Base

A Level B academic shall have qualifications and/or experience recognised by the institution as appropriate for the relevant discipline area. In many cases a position at this level will require a doctoral or masters qualification or equivalent accreditation and standing. In determining experience relative to qualifications, regard is had to teaching experience, experience in research, experience outside tertiary education, creative achievement, professional contributions and/or to technical achievement.