

STANDARD TEACHING AND RESEARCH POSITION DESCRIPTION



Position	Lecturer – Applied Mathematics
Level/ Classification	ACLEB
Reports to	Head of School Maths, Statistics, Chemistry and Physics
Division	Maths, Statistics, Chemistry and Physics
College	College of Science, Technology, Engineering and Mathematics

Position Purpose

A continuing Teaching and Research Academic (Applied Mathematics) is expected to carry out activities to develop scholarly research and professional expertise relevant to the profession or discipline.

The academic will undertake independent teaching and research in Applied Mathematics. The academic will make an independent contribution through professional practice and expertise and coordinate and/or lead the activities of other staff, as appropriate to the discipline.

The academic will contribute to teaching at undergraduate, honours and postgraduate level, engage in independent scholarship and/or research and/or professional activities appropriate to their profession or discipline. They will undertake administration primarily relating to their activities at the institution and may be required to perform the full academic responsibilities of any related administration.

About Murdoch University

Murdoch University is a young and dynamic university with a foundational commitment to the environment, social justice and inclusion, and making education accessible to more people. Founded as Western Australia's second university in 1974, today, Murdoch has more than 21,000 students and 1,700 staff across campuses in Perth, Singapore and Dubai. With more than 90,000 Alumni, Murdoch graduates can be found all over the world, making a positive difference.

Our Strategy – Ngala Kwop Biddi. Building a brighter future, together – guides the University's direction and reaffirms our shared purpose to change lives and society for the better through accessible education and research.

The Strategy is focused on three key themes:

- Sustainability: Be a leading university in education, teaching and translational research in sustainability.
- Equity, Diversity, and Inclusion: Build a welcoming, diverse and inclusive community.
- First Nations: Become the University of first choice for First Nations peoples.

Murdoch is also committed to building engagement with our local community, State, nation, and global society with a track-record in creating strong partnerships with business, government and industry.

About the Work Area

The School of Mathematics, Statistics, Chemistry and Physics (MSCP) sits within the College of STEM. The College of STEM also includes two other Schools – Information Technology and Engineering & Energy. The School of MSCP consists of 27 Academic staff, including 10 in mathematics and Statistics.

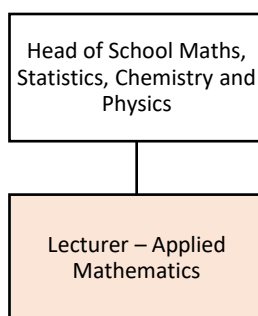
The School of MSCP delivers its own undergraduate Courses (BSc Mathematical Sciences and BSc Physical Sciences) with embedded majors: Mathematics and Statistics, Chemistry, and Physics. We also deliver a Graduate Diploma in Extractive Metallurgy.

Generally, we have an applied interdisciplinary focus in both our teaching and research and so value our deep collaborations with a wide range of industries and government bodies. Within Mathematics and Statistics research expertise spans biostatistics & bioinformatics, mathematical biology, fluid mechanics, industrial mathematics, materials geometry, differential geometry, computational mathematics, and stochastic and Bayesian statistics.

More information about the School can be found here:

<https://www.murdoch.edu.au/schools/mathematics-statistics-chemistry-and-physics>

Reporting Relationships



Key Responsibilities / Duties

1. Contribute to teaching, including unit coordination, preparing and delivering lectures, tutorials, seminars, setting and marking assessments.
2. Develop and practice innovative teaching and learning methods.
3. Contribute to research, individually and as a member of a team, and produce quality publications.
4. Seek external research funds, individually and as a member of a team.
5. Supervise honours, Masters and HDR students.
6. Contribute to the School, College, the University, and the profession through service and their promotion.
7. Develop collegial interactions across the campus.
8. Participate in the University's Academic Career Development Conversations (ACDC).
9. Undertake such other duties as determined by the Head of School.

Selection Criteria

Essential

1. A PhD in an area relevant to the appointment (i.e. mathematics and/or statistics, or a closely related discipline).
2. Demonstrated experience in teaching in the discipline or profession, or two or more years of postdoctoral or equivalent professional experience.

3. Demonstrated ability to work under broad direction only, exercise initiative in undertaking responsibilities and work effectively as a team member.
4. Demonstrated ability to engage in high quality independent research, with an established record of scholarly publications.
5. Demonstrated capacity to produce high quality research funding applications.
6. Demonstrated ability to supervise honours, postgraduate and/or HDR students
7. Demonstrated knowledge of contemporary approaches to curriculum and pedagogy.
8. Well-developed interpersonal skills and the ability to work effectively as a member of an interdisciplinary and collegial team.
9. Demonstrated high levels of written and oral communication skills in English.
10. Commitment to Staff code of conduct and University strategy.

Desirable

1. A track record in the generation of research funding (either independently or as part of a research team).
2. Demonstrated ability to initiate and maintain collaborations with external partners, including with other universities.
3. Experience in or ability to incorporate computational methods into teaching
4. Ability to deliver undergraduate units outside mathematics, into statistics, physics or chemistry.

Work Requirements

1. Australian permanent residency or possession of a valid visa with work entitlement in Australia.
2. Ability to work outside of normal office hours when required.

General Obligations

While at work, an employee must:

- take reasonable care for their own health and safety and ensure that their acts or omissions do not adversely affect the health and safety of other persons;
- report incidents, injuries and hazards;
- comply with any reasonable instruction that is given by Murdoch University; and
- comply with Murdoch University policies and procedures.

Academic Career Framework

Murdoch University's Academic Career Framework provides a transparent, equitable and consistent approach to probation and promotion as well as outcome and workload expectations. Please refer to the Murdoch University Academic Career Framework for performance criteria and expectations for all academic positions.

Guiding Principles and Values / Code of Ethics and Code of Conduct

Our Values

- Authenticity
- Integrity
- Respect
- Inclusivity
- Openness

Our Principles

- Act with justice, respect and responsible care.
- Be collegiate and respectful of other points of view.
- Protect academic freedom.
- Be agile, flexible and resilient.
- Make decisions at the most appropriate level.
- Be transparent in decision-making and with information.
- Adopt common approaches to common tasks.
- Be careful stewards of our resources.

All staff will comply with the University's Code of Ethics and Code of Conduct and demonstrate a commitment to its Equity, Diversity and Safety principles and the general capabilities of personal effectiveness, working collaboratively and demonstrating a focus on results.

All Staff undergoing a probation period are required to set probationary objectives with their leader within 3 months of commencement.

We acknowledge that Murdoch University is situated on the lands of the Whadjuk and Binjareb Noongar people. We pay our respects to their enduring and dynamic culture and the leadership of Noongar elders past and present. The boodjar (country) on which Murdoch University is located has, for thousands of years, been a place of learning. We at Murdoch University are proud to continue this long tradition.