





# Senior Lecturer in Applied Mathematics (Mathematical Biology or Computational Mathematics)

Department/Unit School of Mathematical Sciences

Faculty/Division Faculty of Science

Classification Level C

Work location Clayton campus

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## **Organisational Context**

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The five Schools of the **Faculty of Science** offer a large and diverse range of disciplines in undergraduate and postgraduate courses. Ten Schools from other university faculties contribute to science teaching at all levels, allowing students to choose their studies from physical, biological, biomedical, behavioural, environmental, mathematical and computer sciences. The Faculty of Science has a strong research reputation. The faculty's research spans the theoretical to the applied, contributes to new knowledge and technologies, and challenges how we interact with the world. To learn more about the Faculty of Science, please visit our website: www.monash.edu/science/.

The **School of Mathematical Sciences** is one of the largest of the five Schools in the Faculty, and has close working collaborations with other Schools/Departments such as Physics and Astronomy, Earth, Atmosphere and Environment, Computer Science; and other faculties such as Business and Economics, Arts, Medicine, IT and Engineering. The School has strong links with outside institutions such as CSIRO, the Defence Science and Technology Organisation, and the National Australia Bank and a large number of research institutes and universities around the world.

The School provides undergraduate teaching for students in the Faculties of Science, Engineering, Information Technology and Pharmacy and Pharmaceutical Sciences, as well as postgraduate training in its key areas of research. The School is multidisciplinary with very active groups in algebra and discrete mathematics, analysis and geometry, applied mathematics, fluid dynamics, statistics and stochastic processes, numerical analysis and scientific computing, operations research, and mathematical biology.

# **Position Purpose**

This is a Senior Lecturer position in Applied Mathematics. A Senior Lecturer is expected to make significant contributions to the teaching effort of the university and to play a major role in HDR, research and professional activities.

Reporting Line: This position reports to Professor Philip Hall, Head of School

Supervisory Responsibilities: Honours and/or postgraduate students

Financial Delegation: Not applicable

Budget Responsibilities: Not applicable

## **Key Responsibilities**

Specific duties required of a Level C academic may include:

- Undertake teaching in mathematics, including the conduct of lectures, tutorials, seminars, workshops, and projects
- 2. Initiation and development of subject material
- 3. Course coordination; the preparation and delivery of lectures and seminars
- 4. Supervision of major honours or postgraduate research projects
- Supervision of the program of study of honours students and of postgraduate students engaged in course work
- 6. The conduct of research
- 7. Significant role in research projects including, where appropriate, leadership of a research team
- 8. Involvement in professional activity
- 9. Consultation with students
- 10. Broad administrative functions
- 11. Marking and assessment
- 12. A range of administrative functions the majority of which are connected with the subjects in which the academic teaches
- Attendance at departmental, school and/or faculty meetings and a major role in planning or committee work

# **Key Selection Criteria**

#### **Education/Qualifications**

- 1. The appointee will have:
  - A PhD in mathematics or a related area, with substantial experience as an academic researcher or equivalent after obtaining the PhD

#### **Knowledge and Skills**

- 2. Possess a high level of interpersonal skills and demonstrated ability to work independently and as part of a team across both the education and service sectors
- 3. Demonstrated publication record in high-quality refereed journals, conferences, textbooks or teaching resources
- 4. Demonstrated ability in undertaking outstanding research and leading a research team and project
- 5. Proven record of obtaining significant external grants for research
- 6. Demonstrated record of successfully supervising postgraduate research students
- Ability to work positively and cooperatively with students, internal and external teams and external organisations
- 8. Demonstrated strong record of teaching experience in a tertiary environment including course coordination
- 9. Demonstrated ability to motivate, actively engage and educate a given audience
- 10. Proven ability, commitment and passion for engaging in scholarly and research activities
- 11. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

- 12. Potential to earn income through external research granting bodies with an established record of research grant support
- 13. Proven record of developing and delivering innovative and exciting teaching in mathematics to students at all levels and backgrounds

### Other Job-Related Information

- Travel (e.g. to other campuses of the University) may be required
- Out of hours work (including evenings, weekends and public holidays) may be required
- There may be peak periods of work during which the taking of leave may be restricted

## **Legal Compliance**

Ensure you are aware of and adhere to legislation and university policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.