Casual Academic Staff Hiring Practices for Physics and Astronomy Lab Demonstrators and Supervisor Demonstrators

The Department of Physics and Astronomy\(^1\) offers a range of undergraduate units to students completing programs in the Faculty of Science and Engineering, as well as service and elective units to students from across the campus. We employ casual academic staff to support our teaching of the laboratory-based components of these programs. Expressions of interest (EOIs) from appropriately qualified individuals are invited before the commencement of sessions 1 and 2 each year. Successful applicants may be appointed as demonstrators or supervisor demonstrators.

Job Advert and Expressions of Interest
Application for a position involves two steps:

A job advert will be posted on the MQ Job Opportunities Workday page. All new applicants, and applicants who have not performed sessional teaching in the Department in the preceding one year period, are required to apply via this posting. These applicants are required to provide a CV and may be invited to attend an interview.

In addition, an Expression of Interest (EOI) will be conducted via an online form and be open for at least two weeks, typically opening for Session 1 in December of the year prior and for Session 2 in June. All applicants must complete the EOI in order to be considered for a position. The EOI will be posted as a part of the job advert, and an email will be sent to HDR students and recent casual academic staff when the EOI opens. The deadline for EOIs is non-negotiable and will not be re-opened for late applicants. Should there be a need to invite further EOIs after the deadline, all eligible applicants will be notified. Successful applicants will meet the selection criteria as listed at the end of this document.

Allocation to classes
Typically, the number of submitted EOIs exceeds the number of open positions and allocating large numbers of casual academic staff is challenging. A range of considerations are used in allocating successful applicants to available timeslots, including but not limited to:

- the needs of the unit and the qualification/field of expertise of the successful applicant.
- casual academic staff availability for any given timeslot.
- previous experience of relevant sessional teaching by the successful applicant.
- workload balance across the available casual academic staff.
- providing opportunity for casual academic staff to advance from new hire to experienced demonstrator and, where appropriate, on to supervisor.
- balancing skill levels and providing mentorship for new hires by pairing them with experienced demonstrators.

Some classes will be allocated a supervisor. This typically occurs for classes with more than two demonstrators. Supervisors may sometimes be allocated to more classes than demonstrators might; this is to facilitate the sharing of their expertise and mentorship to junior demonstrators and new hires.

Allocations will be made in the first instance based on ‘preferred’ timeslots as indicated by successful applicants in the EOI, and then based on all remaining availability. Casual academic staff will be directly notified of their class allocations approximately two weeks before the beginning of semester.

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\(^1\) Note: The Department of Physics and Astronomy will become a part of the new School of Mathematical and Physical Sciences on 1 Jan 2022.
Induction and Familiarisation

All appointed demonstrators and supervisors must attend an induction session held by the lab staff prior to the commencement of the session. Attendance is compulsory and casual academic staff will be paid for their time in attendance. The induction session will typically be scheduled 2 weeks before the beginning of the semester.

Familiarisation with the experiments being demonstrated in lab sessions is essential. Demonstrators and supervisors are expected to familiarise themselves with any experiments that:

1. they do not have prior experience demonstrating within a relevant unit, or
2. have changed in any way since a staff member last worked with them.

Familiarisation sessions will typically be scheduled 1 week before the beginning of the semester. Time taken for familiarisation will be paid at the demonstrator rate.

Additionally there are some onboarding activities, including WHS modules and a Faculty induction session, that all new Macquarie University staff must complete before starting employment.

Duties

Regular duties and responsibilities for demonstrators and supervisors are as listed for each role. Supervisors are expected to perform additional duties, for which they receive additional pay.

Remuneration

Casual academic staff will be paid in accordance with the current academic staff Enterprise Agreement and the marking schedule indicated below.

Professional Development

Employment as a casual academic staff member for lab demonstration activities in the Dept. of Physics and Astronomy provides an opportunity for professional development. New demonstrators will be mentored by experienced demonstrator supervisors and by technical and academic staff.

Familiarisation sessions enable demonstrators to build their practical knowledge in the use of a range of equipment, devices and digital interfaces, and to enhance their application of theory in a real-world environment. Casual academic staff may also have the opportunity to build leadership and supervisory skills as their experience with demonstrating develops. Opportunities for formal feedback for interviews and informal feedback for the performance of duties also exist. Casual academic staff employed in the Department will be provided with a letter of reference upon request.

These hiring practices have been established in the Department of Physics and Astronomy in accordance with relevant Macquarie University policy and the Academic Enterprise Agreement. These practices aim to ensure an equitable, representative allocation of available casual academic staff is achieved within the Department each session, and to ensure that the learning outcomes of the units and the students are both fully supported. A gender diverse panel of at least two members of staff are involved in conducting each step of the process (review of EOIs, interviews, allocations). Outcomes are reviewed by the Learning and Teaching Director or the relevant Laboratory Director.

The Department of Physics and Astronomy is committed to ensuring genuine equality of opportunity for all people. This same commitment applies to the hiring of casual demonstrators, demonstrator supervisors and junior convenors (when applicable). Data about the relative gender mix of allocated casual academic staff will be published on the Department Equity and Diversity page.

Any questions or concerns about the above information and process can be directed to the Department Technical Manager for Physics and Astronomy – Bianca Sawyer, the Department Manager – Kelly Sharpless, or the Department Learning and Teaching Director – Dave Spence.

The information provided above relates only to casual academic staff deployed in Department teaching labs. If you have questions or concerns about hiring practices or remuneration associated with any other casual academic staff employment within the Department (such as assignment marking or tutoring) these can be directed to the Department Manager.
Demonstrator Role Description

**Selection Criteria**
- Bachelor's degree majoring in Physics, Astronomy or Astrophysics, or equivalent experience or qualifications.
- The ability to communicate clearly and effectively in English, both verbally and in writing.
- An understanding of physics concepts and theory as taught at MQ in first- and second-year undergraduate programs.
- An understanding of the theory of uncertainties and its application in a lab context.
- An understanding of lab equipment used in first- and second-year undergraduate physics programs, and the ability to manipulate it correctly and safely.
- The ability to supportively guide students who have limited or no physics background.
- The ability to actively manage the safety of staff and students in a lab environment, including the identification and correction of hazards, and appropriate incident reporting.

**Duties and Responsibilities**
- Attend scheduled demonstrator induction session(s) on lab safety and class operations.
- Attend scheduled familiarisation sessions as required to become familiar with lab experiments and equipment.
- Adhere to, and guide students to adhere to, COVIDSafe practices in the laboratory.
- Proactively guide students through their experiments in a clear, supportive, and empathetic way.
- Mark all student work (including both their in-class work and lab books) according to the supplied marking rubric, give appropriate feedback, enter these marks into an online record, and return marked books within 2 business days of the lab session.
- Ensure teaching lab spaces are kept tidy and safe. This includes promptly addressing and/or reporting any safety issues.
- Provide feedback to the supervising demonstrator, lab management team, laboratory academic director or unit convenor as appropriate and/or when prompted.
- Act professionally and in accordance with the Macquarie University code of conduct and Department of Physics and Astronomy Workplace Culture Statement.

**Remuneration**
Demonstrators without a relevant PhD qualification will be paid at the ‘Other Academic Activity: Normal’ (DEM2 - Level A Step 2) and ‘Non-Contemporaneous Assessment: Routine’ rates (MRK3 - Level A Step 2).
Demonstrators with a relevant PhD qualification will be paid at the ‘Other Academic Activity: Normal – PhD/UC’ (DEM1 - Level A Step 6) and ‘Non-Contemporaneous: Routine – PhD/UC’ rates (MRK2 - Level A Step 6).

Demonstrators will be paid for
- Rostered regular hours (Other Academic Activity: Normal)
- Marking of lab books (Non-Contemporaneous Assessment)
- Demonstrator induction session (Other Academic Activity: Normal)
- Familiarisation sessions - approx. 30-60mins per experiment (Other Academic Activity: Normal)

Marking of lab books is generally completed outside of lab times, and you will not be paid for marking completed during paid lab sessions. Marking time will be paid in accordance with the following schedule:
- PHYS1010, PHYS1020 and PHYS1520: 7 min per lab book.
- PHYS1510: 8 min per pair of lab books (students complete lab notes in pairs)
- PHYS1210: 7 min per pair of lab books (students complete lab notes in pairs)

**Relevant Documentation**
- MQ Academic Staff Enterprise Agreement (2018) > [website](#)
- MQ Staff Code of Conduct > [website](#)
- Department of Physics and Astronomy Workplace Culture Statement > [website](#)
Supervisor Role Description

Selection Criteria
In addition to meeting the selection criteria for demonstrators:

- Extensive experience demonstrating for PHYS1000 teaching labs.
- Demonstrated advanced understanding of physics concepts and theory as taught at MQ in first- and second-year undergraduate programs.
- Demonstrated leadership and team management skills.

Duties and Responsibilities
In addition to the duties and responsibilities listed for demonstrators:

- Attend the additional supervisor induction.
- Be present 5 minutes before the start of their rostered class for briefing by the lab manager and to assist with set up.
- Remain in the class for a further 5 minutes at the end of class to assist with allocating lab books and packing away/tidying equipment.
- Manage demonstrators in-session to ensure all tasks are completed correctly, including proactive demonstrating and ensuring that all lab books are returned at the end of the class.
- Assist/mentor demonstrators where appropriate during class and familiarisation sessions to improve their skills as a demonstrator or their understanding of the equipment, experimental process and underlying concepts.
- Arrange a replacement if a rostered demonstrator is unable to attend.
- Manage conflicts that may arise between students, or between students and demonstrators.

Remuneration

Supervisors without a relevant PhD qualification will be paid at the ‘Other Academic Activity: Normal – PhD/UC’ (DEM1 - Level A Step 6) and ‘Non-Contemporaneous Assessment: Routine’ rates (MRK3 - Level A Step 2).

Supervisors with a relevant PhD qualification will be paid at the ‘Other Academic Activity: Normal – PhD/UC’ (DEM1 - Level A Step 6) and ‘Non-Contemporaneous: Routine – PhD/UC’ rates (MRK2 - Level A Step 6).

In addition to the remuneration indicated for demonstrators, supervisors will be paid for

- 10 minutes set-up/pack-down time per class (Other Academic Activity: Normal)
- Up to 30 minutes administration time per class, per week, including the provision of a brief (5 minute) report on any issues arising during each session. Supervisors will claim these hours according to time spent each week (Other Academic Activity: Normal)
- A supervisor induction session - approx. 1 hour, details to be confirmed (Other Academic Activity: Normal)

Relevant Documentation
- MQ Academic Staff Enterprise Agreement (2018) > website
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