

Job Description

| | |
|------------------------|---|
| Job Title: | Classroom Demonstrations & Outreach Coordinator |
| Department: | Physics & Astronomy |
| Reports To: | Administrative Officer |
| Jobs Reporting: | None |
| Salary Grade: | USG 7 |
| Effective Date: | November 2019 |

Primary Purpose

The Classroom Demonstration and Outreach Coordinator manages, designs and develops new demonstrations for the Department, in both its teaching and outreach activities. This includes responsibility for the recommendation, development and acquisition of new instruments and teaching aids in collaboration with teaching faculty. This demonstration equipment, used in lectures and undergraduate labs, is an essential component of the undergraduate teaching program.

Key Accountabilities

Classroom Demonstrations

- Develop curriculum relevant sequences of demonstrations for the teaching activities of the department
- Design and procure teaching demonstrations, both independently and at the request of teaching faculty
- Develops and manages yearly equipment and supplies budget
- Arrange times with faculty to review and practice using demonstration equipment; in some cases, must present the demonstration in class
- Maintains demonstration equipment, performing periodic inspections and minor repairs, as necessary
- Organize, store, manage inventory and sign-out system of demonstration equipment
- Move and set up equipment across campus, as needed
- Liaise with other university departments to supply them with technical advice and equipment to support teaching, where possible

Community Outreach Activities

- Develops, selects, and supports curriculum relevant workshops for Science Open House, Physixx: Girls Matter and Physics Lab Days, working with Outreach committees and liaisons
- Develops and manages yearly equipment and supplies budget
- Acquire, manage and maintain all equipment and instrumentation for Outreach events; Instrumentation may be purchased as-is, or may be highly specific equipment requiring design and fabrication using the machine and electrical shops within Science Technical Services
- Acquire, prepare, transport, set up, and return all materials for events
- Inspect equipment, arrange for storage, replacement and/or repairs at the end of each session and presentation period
- Recruit, organize and train students/ faculty on the equipment and activities
- Provide technical support during all outreach events

Job Description



Teaching Labs Support

- Manages and leads experiment change overs for all equipment used in the undergraduate teaching laboratories
- Aids in the development and improvement of lab experiments
- Leads the development of electronic teaching resources, as directed by the Lab Director
- Maintains and updates instructions for laboratory demonstrations (lab manuals)
- Maintains and inspects undergrad laboratory equipment; repair, replace or, arrange for any necessary repairs
- Organizes lab presentation spaces, prep rooms and storage rooms
- Proctors laboratory sections and exams, as needed
- Other duties, as needed

Departmental Support

- Serves as back up for all communications duties and initiatives, including website, SCInage and newsletter support
- Daily oversight of staff and co-op students who are placed on outreach, and demonstration duties
- Departmental AV liaison
- Provide assistance of the technical nature, as needed

Other duties as assigned

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- Bachelor's Degree in Physics
- Equivalent combination of education and/or experience will be considered

Experience

- 2+ years of experience supporting teaching activities through the development of classroom demonstrations or related activities preferred
- 2+ years of experience managing and developing community outreach activities preferred
- Working knowledge of various demonstration equipment – ranging from simple pre-packaged purchased items to highly complex custom designs requiring extensive in house fabrication using machine shops and electronics shops

Knowledge/Skills/Abilities

- Excellent problem solving abilities
- Exceptional verbal and written communication skills required for presenting at community events
- Ability to exercise good judgment and discretion and work independently with minimal supervision within a fast-paced, deadline driven, multi-tasking environment
- Intermediate knowledge of MS Office
- Knowledge of WCMS and SCInage, preferred

Nature and Scope

Job Description



-
- **Contacts:** This position interacts with faculty and staff members and members of Science Outreach and Communications. Deals with members of the community, for outreach initiatives.
 - **Level of Responsibility:** Position does not have any direct reports but supervises, trains and assists in coordinating the workflow of additional technical staff and co-op students. Responsible for developing, managing and leading community outreach activities.
 - **Decision-Making Authority:** Work is conducted with a high degree of independence. Multiple projects are underway simultaneously. Excellent time management skills are required. Quick decision making, cost-benefit analysis, creative problem solving, and long-term planning are essential
 - **Physical and Sensory Demands:** Minimal physical demands. Demonstrations may need to be transported within the building or across campus. Some demonstration equipment weighs in excess of 25 kg.
 - **Working Environment:** Office and classroom based. Minimal exposure to disagreeable conditions. Some weekend work required for outreach initiatives.