UNIVERSITY OF RHODE ISLAND
Position Description

TITLE: Manager, Physics Laboratories

DIVISION: Academic Affairs (Arts & Sciences: Physics)

REPORTS TO: Department Chair, Instructors

GRADE: 11

SUPERVISES: Research Associates, Research Assistants, Support Staff, Graduate Students and Undergraduate Students

BASIC FUNCTION:

Responsible for the oversight of the physics educational laboratories and for the personnel involved in their operation. Responsible for ordering supplies, procuring and maintaining equipment, and ensuring efficient and safe laboratory operation. Responsible for the general upkeep of the laboratories and associated preparation and storage rooms. Responsible for developing and testing laboratory exercises and training graduate and undergraduate teaching assistants in lab procedures.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Train and supervise graduate and undergraduate teaching assistants whose duties involve the operation of laboratory courses.

Instruct and supervise teaching assistants, in conjunction with the course instructor, in the discharge of their duties and responsibilities for each laboratory, including pedagogy, laboratory procedures, quiz development and grading, and the need for consistency in instruction and grading between sections.

Schedule Teaching Assistants for laboratory sections, exam proctoring, and tutorial assignments in conjunction with the laboratory course instructors and Department Chair.

Participate in the development, distribution and analysis of student evaluations of teaching, and, in conjunction with course instructors, conduct classroom observations; provide feedback on teaching effectiveness to teaching assistants.

Assist instructors in the development, testing and implementation of new laboratory experiments and procedures, and maintain Sakai sites, as needed.

Directly participate in teaching laboratory sections according to the needs of the department.

Organize field tours.
Maintain laboratory equipment, computers, and software. Order new equipment when necessary.

Assist in other laboratory functions, such as preparation of laboratory and lecture demonstrations or visual aids.

Assume responsibility for the administration of equipment inventory and maintenance. Promote good laboratory practices, including required safety procedures for students.

In conjunction with the course instructors and Department Chair, supervise the registration of students in laboratory courses, and maintain course rosters and grades records.

OTHER DUTIES AND RESPONSIBILITIES:

Perform additional duties as required.

LICENSES, TOOLS AND EQUIPMENT:

Personal computers, printers; word processing, database and spreadsheet software; equipment routinely used in physics laboratories. MatLab.

ENVIRONMENTAL CONDITIONS:

This position is not substantially exposed to adverse environmental conditions.

QUALIFICATIONS:

REQUIRED: Master's degree in physics or related field; Demonstrated working knowledge of procedures routinely applied in performing experiments in a physics laboratory, including safety practices; Demonstrated working knowledge of the operation, care and maintenance of equipment routinely used in physics laboratories; Demonstrated experience in teaching general, elementary and advanced physics laboratories; Demonstrated knowledge of laboratory data analysis using programs such as MatLab, Mathematica and Origin; Demonstrated experience in experimental physics; Demonstrated ability to accurately follow detailed written and oral instructions pertaining to the safe and effective operation of physics laboratories; Demonstrated ability to train, direct and supervise undergraduate and graduate teaching assistants in the safe and effective exercise of their laboratory duties and responsibilities; Demonstrated ability to plan and maintain inventories of equipment and supplies for the safe and effective operation of physics laboratories; Demonstrated strong verbal and interpersonal communication skills; Demonstrated proficiency in written communication skills; and, Demonstrated ability to work with diverse groups/populations.

PREFERRED: Ph.D. in physics.

ALL REQUIREMENTS ARE SUBJECT TO POSSIBLE MODIFICATION TO REASONABLY ACCOMMODATE INDIVIDUALS WITH DISABILITIES.