PSME Laboratory Instructional Coordinator

BASIC FUNCTION:

Under the direction of an assigned supervisor, oversee day-to-day activities and maintain and assign instructional computer labs and equipment in the Physical Sciences, Mathematics, and Engineering (PSME) Division; provide specialized instructional assistance and technical support to students and faculty computer users; perform a variety of duties to provide necessary equipment and laboratory simulations to modern science laboratories; order, receive, maintain, and issue laboratory supplies and equipment.

REPRESENTATIVE DUTIES:

1. Oversee the day-to-day operations of assigned instructional computer laboratories including performing opening and closing procedures; assure safety in laboratories; perform laboratory equipment and facility maintenance as necessary.

2. Assist with the design and maintenance of instructional computer laboratories.

3. Perform duties associated with setting-up physical and computer simulated laboratory experiments and laboratory exercises; prepare and set-up computers, tools, equipment, and materials for laboratory and classroom demonstrations, experiments, and other instructional exercises.

4. Maintain specialized equipment and instruments, such as GIS/GPS and other similar systems for all PSME laboratories.

5. Provide assistance and support to faculty and staff regarding computer software, hardware, and equipment needs; provide information and guidance on the use of software, laboratory, and computer equipment.

6. Advise faculty and staff on new or upgraded instructional systems; communicate with faculty regarding future needs; evaluate, price and recommend equipment and software purchases for laboratory materials and supplies.

7. Perform scheduled maintenance and calibration of equipment, including computer equipment; assure the proper performance of all equipment; perform repairs on equipment using tools, drill press, lathe, and other machines.

8. Diagnose and repair computer hardware and software problems including upgrading hardware as necessary; arrange for outside repairs when necessary.

9. Order, issue, and inventory supplies and equipment; assure the safe storage of supplies, materials, and equipment; maintain stock of required hazardous materials; assure proper compliance with federal and State hazardous materials laws.

10. Assist students with operating systems, applications and equipment problems.

11. Establish and enforce lab rules and policies by monitoring lab utilization and communicating with other faculty and staff.
12. Maintain a reference library of instruction manuals and manufacturer's specifications of equipment; establish and maintain an electronic reference library of instructions for set-up of laboratory equipment.

13. Prepare and maintain various records and files; create, monitor and maintain student accounts as assigned; help maintain the Division's web page.

14. Monitor and maintain Physics budget expenditures; evaluate quarterly budget trends on lab expenditures; maintain contact with outside lab/business representatives.

15. Train and provide work direction to assigned personnel.

16. Participate in a variety of division, staff and college meetings, and workshops.

17. Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

1. Computer hardware systems, software applications.

2. Physical Science, Engineering, and Mathematics concepts.

3. Equipment, materials, and supplies utilized in a Physics and Earth Sciences laboratory setting.

4. Laboratory operations and management.

5. Applicable programming languages.

6. Methods and procedures of operating electronic computers and peripheral equipment.

7. Diagnostic techniques and procedures.

8. Technical aspects of field of specialty.

9. Laws and regulations pertaining to hazardous materials.

10. Record-keeping techniques as required to monitor budgets and equipment.

11. Oral and written communication skills.

12. Interpersonal skills using tact, patience and courtesy.

ABILITY TO:

1. Demonstrate understanding of, sensitivity to, and respect for the diverse academic, socio-economic, ethnic, cultural, disability, religious background and sexual orientation of community college students, faculty and staff.

2. Perform complex tasks related to the operation and maintenance of assigned instructional computer laboratories.
3. Perform a variety of duties to provide necessary apparatus, components and equipment for the mechanical, electrical, optical, thermodynamic and modern physics laboratories.

4. Oversee and maintain instructional computer labs and equipment.

5. Assist and advise students, faculty and staff in utilizing facilities and equipment.

6. Set up, configure and install computer hardware, software and file systems.

7. Diagnose and repair basic system malfunctions and maintain system operation.

8. Provide technical guidance and recommendations concerning existing computer programs and systems.

9. Maintain current knowledge of technological advances in the field.

10. Communicate effectively both orally and in writing.

11. Interpret, apply and explain rules, regulations, policies and procedures.

12. Analyze situations accurately and adopt an effective course of action.

13. Work independently with little direction.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: Bachelor’s degree in Computer Science, Physics, or related area and two years experience in a computer lab environment.

WORKING CONDITIONS:

ENVIRONMENT:
1. Laboratory environment.

PHYSICAL ABILITIES:
1. Hearing and speaking to exchange information.
2. Dexterity of hands and fingers to operate a computer keyboard.
3. Seeing to read various materials.
4. Sitting or standing for extended periods of time.

HAZARDS:
1. Exposure to hazardous materials.

DATE APPROVED:
RANGE: N-52
EEO-CATEGORY: H-50