

MT. SAN ANTONIO COMMUNITY COLLEGE DISTRICT

SALARY SCHEDULE: A

SALARY RANGE: 79

CLASS TITLE: LABORATORY TECHNICIAN-MATHEMATICS AND COMPUTER SCIENCES

BASIC FUNCTION:

Under the direction of an assigned manager, prepare and assist with Mathematics and Computer Sciences laboratory demonstrations, exercises and related instructional materials; perform a variety of specialized, complex and independent activities involved in the preparation, set-up and clean-up of supplies and equipment for laboratory demonstrations and activities for the Mathematics and Computer Sciences program.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Prepare and assist with Mathematics and Computer Sciences laboratory demonstrations, exercises and related instructional materials; schedule and adjust laboratory activities to meet instructional needs of assigned subject area and enhance educational effectiveness; confer with faculty and review lesson plans, curriculum, experiments, theories, demonstrations, manuals, exercises and instructional materials to determine laboratory equipment, supply and instructional material needs.

Perform a variety of specialized and independent activities involved in the preparation, set-up and clean-up of supplies and equipment for Mathematics and Computer Sciences laboratory demonstrations and activities.

Operate and maintain various computer hardware and software; troubleshoot computer problems and reformat hard drives and networks as needed; operate monitors, video players, cassette recorders, laser disc systems and other assigned equipment; duplicate and catalogue video tapes as assigned.

Arrange and assemble laboratory materials and equipment; analyze and implement laboratory demonstration, exercise, preparation and set-up procedures; investigate and resolve issues and malfunctions related to laboratory demonstrations and other instructional activities; assure smooth, efficient and educationally effective laboratory activities.

Provide student tutoring, assistance and exam preparation services in support of the Mathematics and Computer Sciences program; answer student questions and explain related instructional materials; proctor, administer and monitor exams and quizzes.

Prepare and revise instructional handouts for computer programming, software usage and related activities.

Oversee lab student workers as required; develop schedules, assign duties and review work for compliance with established standards and procedures.

Monitor inventory levels of laboratory supplies and equipment as assigned by the position; order, receive, store and maintain adequate inventory levels of supplies and equipment; initiate, prepare and process purchase requisitions; estimate required inventory levels; estimate and account for related costs; conduct inventories; issue and collect materials and equipment as required.

Assure the health and safety of students, staff and faculty by researching, implementing and following health and safety practices and procedures; maintain laboratory and other assigned facilities in a safe, secure, orderly and clean manner.

Prepare and maintain various records and reports related to laboratory demonstrations, preparation, experiments, student assistants, supplies, equipment, inventory, purchases and assigned duties; assist with bids and other budgetary matters as requested; obtain authorization of budget expenditures and submit requisitions to appropriate authority.

Communicate with College personnel, faculty and various outside agencies to exchange information and resolve issues or concerns.

Attend and participate in various meetings, committees, workshops and training sessions as assigned.

OTHER DUTIES:

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:**KNOWLEDGE OF:**

Preparation of Mathematics and Computer Sciences laboratory demonstrations, exercises and related instructional materials.

Technical practices, procedures and techniques involved in the preparation, set-up and clean-up of supplies and equipment used in laboratory demonstrations and activities in Mathematics and Computer Sciences.

Advanced laboratory terminology, techniques, equipment, materials, principles, theories, practices and procedures related to Mathematics and Computer Sciences.

Set up, operation, calibration, maintenance and repair of various laboratory instruments, tools and equipment related to the Mathematics and Computer Sciences program.

Computer literacy.

Operation of a computer and assigned software programs.

Inventory practices, procedures and techniques.

Appropriate safety precautions and procedures.

Principles and practices of training and providing work direction to student workers.

Oral and written communication skills.

Interpersonal skills using tact, patience and courtesy.

Record-keeping and report preparation techniques.

ABILITY TO:

Prepare and assist with Mathematics and Computer Sciences laboratory demonstrations, exercises and related instructional materials.

Perform a variety of specialized and independent activities involved in the preparation, set-up and clean-up of supplies and equipment for Mathematics and Computer Sciences laboratory

demonstrations and activities.

Review lesson plans, curriculum, experiments, theories, demonstrations, manuals, exercises and instructional materials to determine laboratory and instructional material needs.

Operate computer hardware and related peripherals.

Interpret, apply and explain laws, codes, regulations, policies and procedures.

Train and oversee the performance of assigned student workers as required.

Order, receive and maintain adequate inventory levels of supplies and equipment.

Arrange and assemble laboratory materials and equipment.

Assist faculty, staff and students in the use of laboratory supplies and equipment.

Observe health and safety regulations and procedures.

Explain instructional and laboratory principles, theories, practices, procedures and techniques.

Assure smooth, efficient and educationally effective laboratory activities.

Meet schedules and time lines.

Work independently with little direction.

Maintain records and prepare reports.

Communicate effectively both orally and in writing.

Establish and maintain cooperative and effective relationships with students.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: associate's degree in Mathematics or related field, or 2 years college-level course work in mathematics, computer science or related field and related laboratory technician or instructional experience. Bachelor's degree preferred.

WORKING CONDITIONS:**ENVIRONMENT:**

Instructional laboratory environment.

Constant interruptions.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a variety of equipment.

Sitting or standing for extended periods of time.

Seeing to read a variety of materials and monitor student activities.

Hearing and speaking to exchange information.

Bending at the waist, kneeling or crouching.

Reaching overhead, above the shoulders and horizontally.

Lifting, carrying, pushing or pulling moderately heavy objects as assigned by the position.