

INSTRUCTIONAL ASSISTANT, MATHEMATICS

DEFINITION

Monitors and maintains one or more instructional mathematics laboratories and tutors students in the fundamentals of arithmetic, algebra, statistics, geometry, trigonometry, ordinary differential equations, calculus, and/or mathematical analysis.

TYPICAL DUTIES

- Schedules and oversees the use of one or more instructional mathematics laboratories by students, faculty, and staff.
- Explains to students the established instructional laboratory policies and use of equipment available within the instructional laboratory.
- Tutors students in the fundamentals of a variety of mathematical disciplines.
- Assists instructional staff by participating in the design and development of study aids.
- Issues and receives supplies, materials, and equipment for student use in laboratory and classroom assignments, keeps records, and effects the return of supplies and equipment checked out to students.
- Trains students in the operation of computers and related software.
- Maintains laboratory attendance and progress records.
- Maintains inventory records of supplies and equipment and prepares periodic inventory reports and requisitions.
- Keeps supplies and equipment in an orderly condition.
- May confer with instructors on the progress of individual students.
- May provide training and work direction to student employees.
- Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

An **Instructional Assistant, Mathematics**, applies a knowledge of the fundamentals and principles of mathematics in assisting students to understand and utilize fundamental through advanced mathematical concepts and is responsible for the day-to-day operations of instructional mathematics laboratories.

Instructional Assistants in other academic disciplines are responsible for the day-to-day operations of instructional laboratories and apply their specialized knowledge to a broad range of duties related to the day-to-day operations of their academic departments.

SUPERVISION

General supervision is received from an academic supervisor. Functional supervision is received from instructional staff. Work direction may be provided to student employees .

CLASS QUALIFICATIONS

Knowledge of:

Basic arithmetic, algebra, statistics, geometry, analytic and plane geometry, trigonometry, linear algebra, ordinary differential equations, calculus, and mathematical analysis
Methods and techniques used in guiding individual students through supplemental and remedial course work
Capabilities, operation, and care of computers, computer software, and calculators
Principles of recordkeeping

Ability to:

Adapt tutorial methods and materials to meet individual student needs
Train students in the operation of computers, computer software, and calculators
Work effectively and cooperatively with students and instructional staff
Give clear and concise instructions
Keep detailed and accurate records
Effectively utilize computer hardware and software common to a mathematics laboratory
Learn general and specialized software applications

ENTRANCE QUALIFICATIONS

Education and Experience:

An associate degree or its equivalent from a recognized college or university with a major in mathematics or a closely related degree which includes at least 27 semester units in mathematics.