

JOB TITLE: INSTRUCTIONAL ASSISTANT- MATH/TECHNOLOGY

PAY GRADE: CL 20

**LAST REVISED:** 06/2007

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job. Additional or different duties from the ones set forth below may be required to address changing business needs/practices.

### **SUMMARY DESCRIPTION**

Under direction of assigned manager, provides a full range of instructional support to mathematic instructional program faculty, students, and staff requiring in-depth knowledge of subject area; provides tutorial assistance to students in a classroom or laboratory setting; provides assistance to students and staff in the use of technology; supervises and provides training to student and/or other temporary workers; maintains the hardware and software for the Mathematics Department's computer network; and performs a variety of other duties as needed to assist in successfully achieving program objectives.

**REPRESENTATIVE DUTIES** - The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- 1. Coordinates and provides tutorial and instructional assistance to individual and groups of students including in a mathematics laboratory setting; introduces, reinforces, and reintroduces information related to mathematics instructional programs; assesses students' current knowledge, understanding, and experience to determine what presentation will engage students' schemata; coordinates computer-assisted instruction, videotaped lectures, and re-testing services; conducts and supervises study groups and review sessions for exams; evaluates student progress and problems and determine when referral is appropriate and to which resource(s) referral(s) should be made.
- 2. Supervises assigned mathematics laboratory programs for students enrolled in laboratory classes; coordinates, prioritizes, and schedules various laboratory activities including laboratory registration, orientation, and testing schedules; assists with scheduling of laboratory hours for instructors and other staff; orients students and instructors to the assigned program and program laboratory including to advise them regarding available services, policies, procedures, and in the purpose(s) and use(s) of laboratory materials and equipment including programmed instruction, reading machines, calculators, and laboratory libraries; develops, maintains, updates, organizes, and provides instructional material, handouts and related materials; selects, prepares, and sets up materials and equipment; takes attendance roll; develops, prepares, and arranges for printing of student survey questionnaires; administers student survey questionnaires in classes and collect and tabulate results; maintains, prepares, and analyzes data on classes; completes forms and/or other necessary documentation for students who have completed assigned program courses; creates and maintains files and records for laboratory students and assigned services and activities.
- 3. Maintains personal computers and associated operating systems and applications software in the Math Center and Mathematics computer laboratories and classrooms; troubleshoots personal computer workstations and software to resolve hardware, software, and operations problems including connectivity, Internet access, and file servers; consults with District and/or external resources for assistance to solve major problems.
- 4. Manages and updates assigned website and web pages for the department; assists instructors in



developing and implementing instructor and class pages; updates information on department and Math Center pages; conducts research on the Internet and other resources for new/updated information links of mathematical interest.

- 5. Assists in the development and/or selection and ordering of appropriate testing materials; administers, monitors, and scores various testing instruments; interprets test results and advises students accordingly; creates and maintains files, computer spreadsheets, and databases of test results.
- 6. Serves as liaison between students, instructors, and other staff informs instructors on progress of students; troubleshoots student academic and/or behavioral and/or attendance problems and alerts instructors to problems; coordinates services to students in absence of instructors; discusses program and/or resolves problems or concerns; interacts with staff members from other District organizational units regarding operations.
- 7. Performs a variety of purchasing and budgeting duties; prepares reports and analyzes expenditures; maintains accessible and accurate financial and budget records for audit purposes; assists in the preparation of budget materials, presentation of budget statistics, program planning, and providing information to assist in determining purchasing needs to support the assigned program; orders supplies, materials, and equipment.
- 8. Recruits and selects students, tutors, volunteers or other temporary help for assigned area; provides training to assigned staff; conducts staff meetings; coordinates, schedules, supervises, assigns work to, monitors hours worked by, and evaluates work performed by student and/or other temporary help.
- 9. Provides a variety of general clerical and administrative support; operates office equipment; performs data entry; processes forms; posts and receives mail; answers telephones and refers messages; duplicates and collates materials; schedules meetings and other appointments for students, instructors and other staff; checks materials in and out in accordance with established District and/or program area policies and procedures; collects, organizes, and maintains files and records; organizes and maintain reference materials and laboratory lending libraries; checks books and videos in and out.
- 10. Performs related duties as required.

**QUALIFICATIONS** - The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

#### Knowledge of:

Lower division college level mathematics.

Tutoring and instructional concepts, principles, and techniques.

Educational methodology in the areas of arithmetic/mathematics and critical thinking.

Learning styles and types of learning disabilities/problems with respect to the study of mathematics.

Computer-aided instructional techniques and applications.

Computer hardware operation and software applications.

Test writing techniques and testing procedures.

Record keeping principle and practices.

Office procedures, methods, and equipment including applicable software applications such as word processing, desktop publishing, spreadsheets, and database management.

Basic budgeting and purchasing procedures and principles.

Supervisory techniques.

#### Ability to:

Provide general instructional support including to provide tutoring and instructional assistance in mathematics for adult students of diverse backgrounds, abilities, and skill levels.



Operate and maintain computer hardware, utilize software applications that are dedicated to the subject matter, and install and configure current operating systems for a computer network.

Make effective presentations to groups.

Relate positively to students in a teaching/learning environment and recognize the difficulties students may have in comprehending the subject matter.

Recognize learning disabilities and make appropriate referrals for assistance.

Listen actively and effectively, identify and solve problems, facilitate learning for students, and build student confidence in mathematics ability.

Design and update materials.

Administer, monitor, score, and interpret standardized diagnostic and other tests and examinations.

Assist with curriculum planning.

Operate office equipment including computers and supporting word processing, spreadsheet, database management, and Internet navigation applications.

Perform minor repairs on machines, computers, and equipment.

Adapt to changing technologies and learn functionality of new equipment and systems.

Perform general clerical tasks.

Train new student and/or other temporary help.

Work independently and collaboratively.

Compile information and statistics and maintain accurate records.

Plan and organize work to meet changing priorities and deadlines.

Learn and apply applicable federal, state, and local laws, codes, and regulations as well as administrative and departmental policies and procedures.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

<u>Education and Experience Guidelines</u> - Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. Examples of ways to obtain the knowledge and abilities would be:

### **Education/Training:**

Two years of college with major course work in mathematics or a closely related field.

### **Experience:**

Two years of increasingly responsible experience in instructional support or similar experience and one year that includes implementing, maintaining, and troubleshooting computer systems and software.

### **License or Certificate:**

Possession of, or ability to obtain, an appropriate, valid driver's license may be required.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT - The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

**Environment:** Work is performed primarily indoors in an education center/classroom/laboratory setting.

<u>Physical</u>: Primary functions require sufficient physical ability and mobility to work in an office and/or education center/classroom/laboratory setting; to stand or sit for prolonged periods of time; to occasionally walk, stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.



<u>Vision</u>: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

**<u>Hearing</u>**: Hear in the normal audio range with or without correction.

Johnson & Associates Revised: June, 2007