

## **GUILFORD COUNTY SCHOOLS JOB DESCRIPTION**

### **JOB TITLE: COORDINATOR I - STEM**

#### **GENERAL STATEMENT OF JOB**

The Coordinator of STEM is responsible for the development, delivery, implementation, and monitoring of STEM (Science, Technology, Engineering, Math) curriculum, initiatives, and educational opportunities. The STEM coordinator will collaborate with stakeholders in education and the community to organize and promote interdisciplinary STEM activities that are aligned with content-area standards. In addition, the STEM Coordinator is responsible for outreach to local community organizations, schools, and businesses to provide enhanced, experiential learning opportunities for all students. Reports to Director of STEM.

#### **SPECIFIC DUTIES AND RESPONSIBILITIES**

##### **ESSENTIAL JOB FUNCTIONS**

Assists teachers and curriculum facilitators with improving techniques of STEM instruction and improving overall student achievement; provides instructional strategies and various tools to aid the instructional process; observes teachers and provides feedback and/or demonstration lessons.

Assists with the overall evaluation of STEM programs in the system and develops strategies for improvement; coordinates and provides staff development opportunities.

Ensures teachers, principals, and curriculum facilitators are familiar with any changes to the North Carolina curriculum regarding STEM; designs curriculum, new course offerings and guidelines for student placement.

Assists the school system with the acquisition of appropriate textbooks, teacher guides and other instructional materials and equipment.

Keeps parents, administrators and community citizens informed about STEM programs in the school system; works with state, community, civic, business and university groups to resolve educational issues.

Works with other departments to ensure equitable access and opportunities for students in STEM programming, college, and career.

Assists with budget development in STEM.

Develops a comprehensive five year plan for the district in STEM.

Design PD program for teachers in PBL (Project Based Learning), curriculum development, environmental sustainability; analyze outcomes to inform future PD.

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Develop STEM curriculum aligned with career pathways that ensure integration of academic and career technical education with 21st century skills.

Create educational opportunities for students through outreach to community and business resources.

Organize, develop, coordinate and provide trainings for administrators and professional staff related to STEM best practices and their integration into the classroom.

Other duties as assigned by the Director of STEM and the Assistant Superintendent of Teaching, Learning, and Professional Development.

### **ADDITIONAL JOB FUNCTIONS**

Serves as a consultant to college and university teacher education programs.

Performs other related work as required.

### **MINIMUM TRAINING AND EXPERIENCE**

Bachelor's degree in mathematics, science or engineering; Master's degree with experience in science, math, or career and technical education; administrative experience preferred, 3 to 5 years of experience teaching STEM topics, job development/community outreach experience.

### **SPECIAL REQUIREMENTS**

Must be certified to teach in the State of North Carolina. Must possess a valid North Carolina Driver's License.

### **MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS**

**Physical Requirements:** Must be physically able to operate a variety of equipment including computers, overhead projectors, typewriters, copiers, facsimile machines, calculators, protractors, compasses, etc. Must be physically able to operate a motor vehicle. Must be able to exert up to 10 pounds of force occasionally, and/or a negligible amount of force constantly to lift, carry, push, and pull or otherwise move objects, including the human body. Light Work usually requires walking or standing to a significant degree.

**Data Conception:** Requires the ability to compare and/or judge the readily observable, functional, structural or composite characteristics (whether similar or divergent from obvious standards) of data, people or things.

**Interpersonal Communication:** Requires the ability to speak and/or signal people to convey or exchange information. Includes giving instructions, assignments or directions to subordinates or assistants.

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**Language Ability:** Requires the ability to read a variety of correspondence, reports, forms, applications, purchase orders, test results, etc. Requires the ability to prepare correspondence, reports, presentations, newspaper articles, requisitions, forms, evaluations, budgets, etc., using prescribed formats and conforming to all rules of punctuation, grammar, diction, and style. Requires the ability to speak before groups of people with poise, voice control and confidence.

**Intelligence:** Requires the ability to apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions; to interpret an extensive variety of technical instructions in mathematical or diagrammatic form; and to deal with several abstract and concrete variables.

**Verbal Aptitude:** Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in standard English.

**Numerical Aptitude:** Requires the ability to utilize mathematical formulas; to add and subtract; multiply and divide; utilize decimals and percentages; and to apply the principles of algebra, trigonometry, geometry, calculus and descriptive statistics.

**Form/Spatial Aptitude:** Requires the ability to inspect items for proper length, width and shape.

**Motor Coordination:** Requires the ability to coordinate hands and eyes rapidly and accurately in using office equipment.

**Manual Dexterity:** Requires the ability to handle a variety of items such as office equipment and hand tools. Must have minimal levels of eye/hand/foot coordination.

**Color Discrimination:** Does not require the ability to differentiate between colors and shades of color.

**Interpersonal Temperament:** Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under stress and when confronted with emergency situations.

**Physical Communication:** Requires the ability to talk and hear: (Talking: expressing or exchanging ideas by means of spoken words. Hearing: perceiving nature of sounds by ear.) Must be able to communicate via telephone.

### **KNOWLEDGE, SKILLS AND ABILITIES**

Thorough knowledge of theories and principles that are used in STEM education.

Thorough knowledge of the North Carolina State Curriculum as it applies to STEM.

Considerable knowledge of the current literature, trends, and developments in the field of STEM instruction.

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Considerable knowledge of the principles of supervision, organization and administration.

General knowledge of District and School Board policies, procedures and standards regarding STEM education.

General knowledge of the organization and communication channels of the school system.

General knowledge of the ethical guidelines applicable to the position as outlined by professional organizations and/or federal, state and local laws, rules and regulations.

General knowledge of the grant application and administration process.

Skill in counseling and developing staff.

Ability to review and evaluate testing results and to develop a plan of action based on conclusions.

Ability to develop innovative and effective STEM instructional materials.

Ability to use common office machines and popular computer-driven word processing, spreadsheet and file maintenance programs.

Ability to maintain complete and accurate records and statistics and to develop meaningful reports from that information.

Ability to develop meaningful annual budgets.

Ability to effectively express ideas orally and in writing.

Ability to make effective oral presentations before large groups of people.

Ability to exercise considerable tact and courtesy in frequent contact with the public.

Ability to establish and maintain effective working relationships as necessitated by work assignments.

### **DISCLAIMER**

The preceding job description has been designed to indicate the general nature and level of work performed by employees within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of employees to this job.