

Job Title: Instructional Specialist, STEM (Secondary)

Supervisor: STEM Instructional Supervisor

Position Code: Pay Grade: 40

Job Classification: Exempt Contract Length: 245 Days

### **Job Summary**

The STEM Instructional Specialist (Secondary) supports real-world, cross-disciplinary STEM integration for grades 6–12. This role provides instructional coaching, curriculum development, and collaborative leadership for STEM magnet and specialty programs, competitive robotics, computer science integration, emerging technologies such as artificial intelligence, and summer STEM/STEAM programming. The specialist helps prepare students for future-ready careers by developing project-based, career-connected learning experiences aligned with division priorities.

## **Essential Duties**

- 1. Supports secondary teachers by planning, modeling, and co-teaching effective STEM instruction across content areas, and by guiding lesson development aligned to instructional goals.
- 2. Provides classroom-based instructional coaching, including observations, feedback, and reflection aligned to teacher and student needs.
- 3. Participates in and co-leads Professional Learning Communities and leadership teams, offering targeted feedback on instructional planning, implementation, and improvement.
- 4. Assists with classroom organization, resource procurement, and planning of learning activities that support curricular goals.
- 5. Collaborates with science, math, CTE, and instructional technology teams to deliver integrative, standards-aligned STEM instruction.
- 6. Partners with the STEM Instructional Supervisor and building leaders to identify and respond to instructional needs using data analysis, benchmarks, and action planning.
- 7. Supports teachers in using data to plan targeted interventions and monitor instructional outcomes.
- 8. Engages in curriculum development, including integrative STEM design briefs, interdisciplinary projects, and computer science integration.
- 9. Designs and delivers professional learning for teachers focused on STEM pedagogy, technology integration, and curriculum alignment.
- 10. Maintains coaching logs, schedules, and outcome data to inform and improve practice.
- 11. Provides leadership and coordination for the division's competitive robotics program, including managing teams, events, coaches, and equipment.
- 12. Builds and maintains industry partnerships to support robotics and expand student opportunities.
- 13. Contributes to the design and implementation of STEM magnet and specialty programs and Virginia High School League-aligned robotics at the high school level.
- 14. Develops and implements summer STEM/STEAM programming through curriculum support and in-class instructional coaching.
- 15. Promotes real-world, project-based STEM instruction that drives innovation, problem-solving, and career readiness, while modeling ethical technology use and digital citizenship.

### **Other Duties**

- 1. Engages in continuous learning to remain current with research, emerging technologies, and best practices in STEM instruction, including state and national standards across STEM content, technology, and computer science.
- 2. Performs any other related duties as assigned by the STEM Instructional Supervisor or appropriate administrator.

# **Job Specifications**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position.

# Minimum Qualifications (Knowledge, Skills and/or Abilities Required)

Must hold a Bachelor's or Master's degree and be eligible for a Virginia teaching license. A minimum of five years of effective classroom teaching experience is required, preferably at the secondary level, with demonstrated success in STEM instruction. Experience as a lead teacher, department chair, or in another instructional leadership role is required.

Candidates should demonstrate strong instructional coaching and facilitation skills; deep knowledge of STEM content, instructional practices, and curriculum design; and excellent organizational, communication, and collaboration skills. Proficiency with digital tools such as Canva and Google Workspace (Docs, Slides, Sheets, and Forms) is required. Preferred qualifications include certification in educational technology (e.g., ISTE or Google Certified Educator), familiarity with entry-level coding platforms (e.g., Scratch, Code.org, Tynker), and working knowledge of emerging technologies such as artificial intelligence (AI) and Internet of Things (IoT) in educational settings.

The ability to build strong, supportive relationships with students, teachers, and administrators is essential. Candidates must also be available to support occasional evening and weekend STEM events.

## **Working Conditions & Physical Requirements**

Must have the ability to sit and stand for extended periods; exhibit manual dexterity to operate a computer and related devices; see and read digital and printed materials with or without visual aids; hear and understand speech in varied settings, including on the phone and outdoors; and speak clearly in person and in virtual environments. Physical agility is required to lift and transport materials up to 25 pounds, bend, stoop, climb stairs, and reach overhead.

This position requires transporting instructional and professional development materials using personal transportation to schools and event locations as needed.

## **Work Environment**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Duties are normally performed in a school, office, or event setting. The noise level in the work environment is usually moderate.

Supervision Exercised: None

**Supervision Received:** STEM Instructional Supervisor

This job description does not state or imply that these are the only duties to be performed by the employee in this position. The Instructional Specialist, STEM, is expected to follow other job-related instructions and perform additional duties as assigned by the STEM Instructional Supervisor or appropriate administrator. This position also contributes to the Department of Teaching and Learning team, supporting alignment, innovation, and professional growth across content areas. Newport News Public Schools reserves the right to update, revise, or change this job description and related responsibilities at any time.

Approvals:		
Supervisor		Date
I acknowledge that I have rece	eived and read this job description.	
Employee Name (Print)	Signature	Date