

District Robotics Head Coach

DEPAR	TMENT:	Extracurricular	REPORTS TO:	Assistant Superintendent of C&I
WORK SCH	EDULE:	Seasonal	COMPENSATION:	Stipend
FULL/PAF	RT TIME:	Part time	FLSA STATUS:	Exempt

Position Description

Oversee the development and performance of the robotics teams across the district in extracurricular learning, demonstrations, and/or competitions. Work with head coaches, team members as they design, build, and program robots to complete designated tasks, as well as train and mentor team members in the skills needed to succeed in robotics demonstrations and/or competitions. Maintain confidentiality to protect the privacy of students and staff.

Task Title	Essential Job Functions	Percent of Time Spent
Robotics Team Training and Development	 Train and mentor robotics head coaches in the skills needed to succeed in robotics competitions, including programming, engineering, and teamwork. Monitor district robotics teams progress and provide constructive feedback to head coaches. Actively recruit students, as needed and appropriate, to promote inclusion of students of color and students identifying as female on school teams. Foster a positive culture across the district that values inclusivity, respect, and hard work. Oversee competitions, registrations, manage fees, host visiting schools, and coordinate travel. Coordinate district-wide annual robotics competition schedule. 	50%
Robotics Team Operations Management	 Oversee the robotics teams district-wide and ensure their efficient and effective operation. Communicate with head coaches, families and school officials to keep them informed of team activities and progress. Manage district program budgets, equipment inventory, and other resources, ensuring that they are used effectively and efficiently. Responsible for managing up to \$20K in robotics assets. Communicate proactively with all appropriate personnel and organizations (technology department, head coaches, VEX IQ/REC Foundation). 	25%
Practice and Competition Management	 Collaborate with head coaches and team members district-wide to design, build, and program robots for demonstration and/or competition. Help manage district team logistics, including scheduling, transportation, and equipment management. Coordinate with head coaches, as needed and appropriate by school, to ensure support to all team members. Coordinate with head coaches from other schools, as needed and appropriate, to support the success of robotics teams across the 	25%

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	 district. This may include hosting competitions and/or supporting other Kirkwood schools that are hosting. Work with the REC Foundation and VEX community to uphold guidelines set forth for competitive robotics for competitions. Responsible for Tournament Manager computer software. Order supplies and materials necessary for competitions. On-site for all competitions to support robotics teams and to help trouble shoot issues should they arise. Train judges and referees for competitions, secure judges and referees for competitions. Secure location/s for competitions 	

The intent of this job description is to provide a representative description of the types of duties and responsibilities required for this position. Employees may be asked to perform other job-related duties as assigned.

Supervisory Responsibilities

- Supervisory Responsibility: N/A, not responsible for supervising employees
- Supervisory Activities: None
- Budget Signing Authority: No budget signing authority.
- Decision-making Authority: Decisions impact a functional area or department

Qualifications

Required

Valid Missouri driver's license

Preferred

- **Education:** Bachelor's degree in education, engineering, computer science, or related field, from an accredited institution
- Licensure: Missouri teaching license
- Certificates, Certifications, or Other Training: Project Lead the Way teaching credential
- **Previous Work-Related Experience:** 1–3 years coaching or mentoring K–12 students in robotics, engineering, or related fields.

Knowledge & Skills

Knowledge

- Basic:
 - Management: Business/management principles involved in strategic planning, resource allocation, leadership, and coordination of people and resources.

Intermediate:

- Accounting: Accounting principles, practices, and the analysis and reporting of financial data.
- Administrative: Administrative and office procedures, functions and basic office tasks.
- Health Services: Treating and preventing disease, and improving and preserving physical and mental health and well-being.
- Law/government: Relevant local, state, and national laws and government regulations including KSD Board of Education policy

• Advanced:

- Customer and personal service: Principles and processes for providing customer and personal services.
- Education/Training: Principles and methods for curriculum and training design, teaching and instruction, and measuring training effects.
- Electrical and Mechanical Engineering: Materials, methods, and the tools involved in the construction or repair of robotics equipment.

Expert:

- Computers/IT: Electronic equipment, robots, and computer hardware and software, including applications and programming.
- Safety/Security: Equipment, policies, and procedures for the protection of people, data, property, and the organization.

Skills

- Constantly (More than 5.6 hours or 69% of the day): Instructing, Service orientation, Social perceptiveness, Speaking, Systems analysis, Time management
- Frequently (Between 2.6 hours and 5.5 hours or 33% to 68% of the day): Active learning,
 Active listening, Complex problem solving, Coordination, Critical thinking, Judgment and
 decision making, Learning strategies, Management of material resources, Mathematics,
 Monitoring, Operation monitoring, Persuasion, Programming, Reading comprehension,
 Science, Technology design, Troubleshooting
- Occasionally (Up to 2.5 hours or 32% of the day): Equipment maintenance, Equipment selection, Installation, Operation and control, Operations analysis, Quality control analysis, Repairing, Systems evaluation
- Rarely (Less than 1 hour or 12% of the day): Management of personnel resources, Negotiation, Writing

Working Conditions

Physical Demands

- Constantly (more than 5.6 hours or 69% of the day): Color Vision, Finger Dexterity, Hearing, Repetitive Motion, Walking
- Frequently (Between 2.6 hours and 5.5 hours or 33% to 68% of the day): Sitting, Standing
- Occasionally (Up to 2.5 hours or 32% of the day): Balancing, Carrying/Lifing, Crawling, Crouching/Kneeling, Reaching
- Rarely (Less than 1 hour or 12% of the day): Multi-limb Coordination, Pulling/Pushing

Mental and Psychological Demands:

 Medium demands: The job requires some mental effort and involves moderate levels of stress (e.g., Occasional need to deal with difficult customers or manage emotions when interacting with others, sometimes work under tight deadlines, limited or no exposure to public criticism, occasionally requires extended periods of concentration on complex tasks).

Work Type/Physical Demands

• Light work: Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or a negligible amount of force constantly to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for sedentary work and the worker sits most of the time, the job is rated for light work.

Working Environment

Moderate risk and discomfort level: The work involves moderate risks or discomforts that
require basic safety precautions, e.g., working around moving parts, carts, or machines;
exposure to contagious diseases or irritant chemicals. Employees may be required to use
common protective clothing or gear, such as masks, gowns, coats, boots, goggles, gloves, or
shields.

EEO Statement

Kirkwood School District is an Equal Opportunity Employer and does not discriminate on the basis of race, color, religion, national origin, age, disability, or sex, including pregnancy, sexual orientation, and gender identity and other characteristics protected by law.

Last Updated: April 22, 2024