

## North Kingstown School Department

### FUNCTIONAL JOB DESCRIPTION

<b>Job Title:</b>	<b>Robotics</b>				
<b>Department:</b>	<b>After school club</b>				
<b>Reports to:</b>	<b>Assistant Principal, Student Services</b>				
<b>Supervises:</b>	<b>Students</b>				
<b>Description of job:</b>					
<p><b>CLUB BEGINS AT THE FIRST SCHOOL COMMITTEE APPOINTMENT IN SEPTEMBER AND CONTINUES WEEKLY COMPETITION SEASON ENDS, TYPICALLY IN MARCH WITH QUALIFYING ROUNDS AFTERWARDS.</b></p> <p>The Robotics Club is an after school club where students who are interested in the principles of engineering and computer programming meet to design and build a working robot for the purpose of competing in the annual State FIRST Tech Challenge competition in February. This competition is one where the students program and “drive” their robot using remote controls to compete against other schools in a point-based game. This competition is also the next progression for those students who have had experience in the FIRST Lego League competition at the middle school level. The club meets Tuesdays, Wednesdays, and Thursdays afterschool from 2:00 – 4:15, and every other Saturday from 9:00 - 1:00 from September until the end of competition season, which normally ends in mid February but could extend to mid-April if the team advances to the World Championship. The number of competitions each year ranges from 3 - 5, with each competition being spread over 2 days (Friday evenings and Saturday morning and afternoon) and are usually off campus.</p> <p>Tier I</p>					
<b>Protective Personal Equipment:</b>		n/a			
<b>Classification:</b>	<b>Sedentary:</b>	<b>Light:</b>	<b>Medium: X</b>	<b>Heavy:</b>	<b>Very Heavy:</b>
<p><i>Classification Key:</i>  <b>Sedentary</b> – Exerting up to 10 lbs. of force occasionally; negligible amount of force frequently to lift, carry, push/pull or otherwise move objects;  <b>Light</b> – Exerting up to 20 lbs. of force occasionally and/or 10 pounds of force frequently or negligible amounts of force constantly to move objects;  <b>Medium</b> – Exerting 20 lbs. – 50 lbs. of force occasionally; 10 lbs. – 20 lbs. frequent; and/or greater than negligible up to 10 lbs. of force constantly to move objects;  <b>Heavy</b> – Exerting 50 lbs. – 100 lbs. of force occasionally; in excess of 50 lbs. frequently; 10 lbs. – 20 lbs. of force constantly to move objects;  <b>Very Heavy</b> – Exerting in excess of 100 lbs. of force occasionally; and/or in excess of 50 lbs. of force frequently; in excess of 20 lbs. of force constantly to move objects.</p>					
<b>Driving Requirements:</b>	None: X		Manual:		Automatic:

Work Environment			
<b>Floor Surface:</b>	Tile and/or carpet		
<b>Inside:</b>	Yes	<b>Outside:</b>	
<b>Lighting:</b>	Incandescent or Fluorescent		
<b>Vibration:</b>	n/a		

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## PHYSICAL DEMANDS

LIFTING						
Maximum weight lifted: up to 50 pounds occasionally						
WEIGHT	Never	Occasionally	Frequently	Constant	Heights	Description of object
0 – 10 lbs.			X			
10 – 20 lbs.			X			
20 – 35 lbs.			X			
35 – 50 lbs.		x				

CARRYING						
Maximum weight carried: up to 50 lbs.						
WEIGHT	Never	Occasionally	Frequently	Constant	Distances	Description of object
0 – 10 lbs.			X			
10 – 20 lbs.			X			
20 – 35 lbs.			X			
35 – 50 lbs.		x				

PUSHING/PULLING						
Maximum push/pull: 35 lbs.						
WEIGHT or FORCE	Never	Occasionally	Frequently	Constant	Distances	Description of object
0 – 10 lbs.			X			
10 – 20 lbs.			X			
20 – 35 lbs.			X			
100 + lbs.		X				

ACTIVITY	Never	Occasionally	Frequently	Constant	Comments
Sitting		X			
Standing			X		
Walking			X		
Bending			X		
Twisting			X		
Crawling	X				
Kneeling			X		
Squatting			X		
Climbing	X				
Reaching – Vertical			X		
Reaching – Horizontal			X		
Grasping			X		
Pinching			X		
Manual Dexterity			X		
Fine Dexterity			X		

**FREQUENCY KEY:** Never (0%); Occasionally (0 – 33% of shift); Frequently (34-66% of shift); Constant (67 – 100% of shift)

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### Qualification Requirements:

To perform this job successfully, an individual must be able to perform each of the above noted essential duties satisfactorily. The requirements listed below are representative of the knowledge, skill, and /or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Available after school.

Familiarity with robotics, able to instruct the functions of building, designing and executing robotic components for educational purposes and for competitions. Teacher in good standing, preferably at NKHS.

### Education and/or Experience:

Bachelor Degree

### License/Certificate/Certification:

Teacher certificate

### Technological and/or Technical Skills:

Basic understanding of how to use hand tools as well as principles of computer programming.

### Communication Skills:

Strong verbal and written skills required for instruction, correspondence, and communication with administration and competition organizers.

### Planning Skills:

Required to take attendance and submit to the building principal on a monthly basis. Must be able to understand competition expectations and plan instruction accordingly. Have a clear mission for the club with written agendas that promote NKHS in a positive manner and is inclusive of all students.

### Interpersonal and Problem solving skills:

Strong need to help students learn to program their robots and execute designs.

Ability to interface with parents, students and staff members in a helpful, efficient and professional manner. Confidentiality a must.

### Terms of Employment:

1 year. Posted yearly

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**Evaluation:**

**Date: 2/2019, 8/2019**