



BITlab Coordinator

Position Description

1/25/17

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| Employment category: | Instructional Staff Plus |
| Full/part time: | Full-time |
| Work year: | 11-month |
| FLSA status: | Exempt |
| Supervisor: | STEM Director |

Summary: The BITlab Coordinator is an innovative and experienced design thinker who collaborates with Bullis K-12 instructional staff to create and deliver making opportunities for Lower, Middle and Upper School students. The coordinator will supervise the Bullis Innovation & Technology Lab (BITlab), the new home for design, technology, engineering and fabrication in our soon-to-open Discovery Center (July 2017). The coordinator will be charged with growing a budding maker program that establishes the BITlab as a community resource for learning in STEM, and a place which redesigns teaching and learning at Bullis.

Primary Responsibilities:

- Identify specific program objectives based on divisional needs and collaborate with K-12 teachers to increase STEM, design, innovation and maker opportunities among the student community.
- Train, guide and supervise students as they learn to utilize BITlab resources during the regular school day and during extracurricular programs.
- Create and continually upgrade curriculum for stand-alone maker courses, team-taught courses and after school extracurricular programs.
- Develop and provide staff workshops and programs in the use of the BITlab
- Plan and implement special programs, such as maker pop-ups and field trips, as well as summer programs to support school-wide making initiatives
- Identify and share tools for innovation, design and making to solve authentic problems
- supervise and maintain the BITlab which includes scheduling, inventory, budgeting, room setup and equipment upkeep and updating (software and hardware)
- Facilitate connections with other maker communities and external organizations that promote program participation and provide collaborative opportunities (such as Maker Faires, workshops, hackathons, etc.)

Qualifications

- Must possess an undergraduate degree in a STEM-related field

- Have experience in an educational makerspace environment
- Classroom experience and strong classroom management skills and/or experience with public speaking
- Ability to lift or move 25 lbs. as needed

Well-qualified candidates will possess:

- A graduate degree in a related content area or education
- Arts background
- Maker Faire participation experience
- Experience with some of the following Design/Making/Computer Skills:
 - Interest/abilities in physical computing (ex. Arduino, Raspberry Pi), open source hardware and software, video and audio production, and 2D and 3D design
 - Wood, plastic or metal cutting, shaping and fabrication, including the use of related tools (3D printer, laser cutter, CNC mill, vacuum former, injection mold, paint booth etc.) and familiarity with safety procedures for those tools
 - Knowledge of basic electronics
 - Robotics
 - eWearables
 - Computer and coding experience in any environment, but preferably for Arduino, HTML, Javascript or Scratch, AppInventor, Processing

Key Skills

Common to all positions:

- Interpersonal/collaboration skills
- Communication skills
- Time management skills
- Problem solving skills
- Quality of work skills
- Information technology skills

Specific to this position:

- Demonstrate a strong desire to look beyond traditional approaches and disciplinary boundaries
- Take risks to try something new and continually broaden their creative tool set
- Be fearless and excited about learning
- Model passion and a strong understanding of the principles of engineering and design thinking
- Work collaboratively to foster natural curiosity and confidence in both students and adults
- Be committed to building relationships within the Bullis community that will advance programmatic goals and promote “outside the box” thinking
- Be an experienced practitioner and mentor in the making processes
- Be comfortable with training others in how to use hand tools, electronics, computer software, hardware, desktop fabrication and various other technologies.
- Be a nurturing teacher with strong instructional skills and a current knowledge of various material design
- Demonstrate flexibility, a positive attitude and a desire to help teachers and students explore making, design and engineering in meaningful ways