

FABLAB STEM Instructional Specialist

SUMMARY:

The primary purpose of the FABLAB STEM Instructional Specialist is to oversee the overall operation of the FABLAB and the development of STEM based professional development.

ESSENTIAL FUNCTIONS:

- Leads staff, interns, and volunteers working in the FABLAB and manages their training on the use of the FABLAB software, computers, and manufacturing equipment.
- Enforces protocols for safe and effective use of the lab; monitors and maintains optimal safety conditions in the lab.
- Maintains the equipment, manages supply inventory, and manages the budget.
- Helps maintain schedules and provides supervision of the lab and its staff and volunteers.
- Assists in operating the FABLAB on a day-to-day basis and mentors students, teachers and community members by assisting them with their projects and ideas.
- Assists administrators, teachers, students, and community members by providing professional development opportunities in the area of fabrication technology.
- Provide Teacher, Department, and School Level Professional Development Opportunities for teachers to gain familiarity with STEM software, tools, and equipment and the opportunity to learn and practice problem-based learning (PBL) teaching methods.
- Collaboration and assistance to classroom teachers in implementing hands-on, problem based learning opportunities that incorporate STEM software, tools, and equipment into the classroom curriculum and monitor such implementation.
- Provide Teacher, Department, and School Level feedback and continued assistance to ensure implementation of STEM activities is useful to both the teachers and the students involved.

The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related, or a logical assignment of the position.

REPORTING STRUCTURE:

This position reports to the FABLAB Manager.

QUALIFICATION REQUIREMENTS:

The requirements listed below are representative of the knowledge, skills, and ability required to successfully perform the essential functions of this position.

EDUCATION AND/OR EXPERIENCE:

Minimum of a two (2) year STEM degree (ME, CS, IT or two year teacher prep program), and/or similar job experience; BS/MS in Education, Business or other STEAM related field, related experience in the field with significant technical experience or three (3) years of recent professional experience providing support services in a directly related unit or discipline preferred.

- Experience with image editing, CAD/CAM applications, and design software.
- Experience with fabrication equipment such as a vinyl printer/cutter, laser etcher/cutter, CNC mill, CNC plasma cutter, and other related equipment.
- Experience working in or using manufacturing/industrial and rapid prototyping technology.
- Proficient in common desktop applications (web browsing, Microsoft Office Suite, image editing).
- Strong interpersonal skills as well as written and oral communication skills are essential for this position.
- Confidentiality, maturity, and professionalism at all times are essential for this position.
- Experience in teaching and/or demonstration of science and technology, especially in a community environment.
- Prior FABLAB, Makerspace or PLTW work experience may be substituted for any/all of the above.

Descriptor Term:

GFABV

JOB DESCRIPTION

ISSUE DATE: 12-14-2020

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LANGUAGE AND REASONING SKILLS:

Ability to understand written or oral instructions; read, analyze and interpret complex documents, instruction manuals, policies and procedures is essential. Excellent communication skills are required to effectively present information in a one-on-one and small group setting. Strong interpersonal skills are essential to maintain effective working relationships with others. The ability to work effectively and efficiently, under stressful conditions, to ensure deadlines are met is essential. Must have demonstrated, through prior work experience, the ability to identify and resolve, in a courteous and professional manner, complex issues and problems while adhering to an appropriate policy and procedure.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

This position is required to sit and stand for moderate periods of time and the ability to see and hear. Frequently, this position is required to walk, stoop, climb, and lift up to 70 pounds.

WORKING ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

This position typically works in a well-lit, climate controlled, and adequately ventilated office environment and requires observance of safe work practices, fire regulations, and avoidance of falls, trips, and similar shop/lab work hazards. However, there will be times when the temperature in the lab is higher than normal. The stress level for this position is moderate and the noise level for this position is moderate normally.

TERMS OF EMPLOYMENT:

To be employed for 200 days per year.

Salary to be pro-rated and established by the school board policy GGBC.

A portion of this salary may be funded by Federal Programs

An additional \$6,000 will be included in the salary for National Board Certification, provided the Mississippi Department of Education continues to endorse the program.

Employees without prior teaching experience may be credited with up to 3 years of experience for work in a field related to this position.

