



**YOUNGSTOWN  
STATE  
UNIVERSITY**

**CLASSIFICATION SERIES:**

N/A

**CLASSIFICATION CODE/PAY GRADE:**

52342/64

**BARGAINING UNIT:**

ACE

**STEM Laboratory Specialist**

**SERIES PURPOSE:** The purpose of the STEM Laboratory Specialist occupation is to oversee the operations of the 3-D Printing Laboratory and Moser Machine Shop including supervision of student lab utilization, design and fabrication of parts and machines, service and repair of machinery, and maintaining inventory of equipment and supplies.

**CLASS CONCEPT:** The class works under general supervision and requires considerable knowledge of 3-D printing and machine shop operations; provides input into the development of policies concerning lab and machine shop operations and enforces policies. Incumbent participates as part of a team of laboratory personnel to ensure the efficient utilization of the 3-D printing Laboratory and Moser Machine Shop; ensures the safety of lab personnel and students.

**JOB DUTIES: Incumbents may perform some or all of these duties or other job-related duties as assigned.**

Provides supervision of student use in the LaunchLab facility and other work space facilities associated with the STEM College; maintains, calibrates, and schedules the use of the 3-D printers and scanners in the LaunchLab including cutting, drilling, and post-processing of printed items; prioritizes jobs on 3-D printers and scanners; supervises and schedules the student lab assistants; attends LaunchLab promotional events.

Provides assistance to other STEM personnel with the operation of the Moser Machine Shop; supervises student use of machinery; instructs students on proper and safe equipment utilization; provides assistance to students with the construction of STEM competition projects; provides guidance for first-year engineering students on OHWow projects including assistance with 3-D printer use; provides technical support for senior design projects; participates in the development of policies related to the machine shop, LaunchLab, and equipment use.

Designs and fabricates parts and machines to support various University projects using available materials; services and repairs machine and laboratory equipment as needed; assists with the setup of events; coordinates moves involving engineering personnel and equipment housed in Moser Hall; assists in selection of furniture and equipment and coordinates placement and installation; serves as liaison in

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interactions with university architect, project architects, delivery services personnel, movers, etc. as needed.

Locates and orders materials, parts, and machines to carry out above functions; develops and prioritizes equipment and budget requests to the Dean; prepares annual activity and inventory reports; participates in the annual equipment inventory reporting; attends training courses to remain up to date on latest technologies.

Performs other related duties as assigned.

**KNOWLEDGE, SKILLS, AND ABILITIES:**

Knowledge of: 3-D printing processes and techniques; laboratory machine shop procedures and equipment operation; blueprint reading; safety practices and procedures.

Skill in: operation of 3-D printing and machine shop equipment.

Ability to: deal with problems and/or issues involving several variables within familiar context; interpret variety of technical manuals and documentation; communicate verbally and in writing on technical and non-technical matters; gather, collate, and classify information about data, people, or things; prepare and maintain accurate and concise reports and records; handle routine contacts with government officials, business officials, consultants, and/or general public.

(\*) Developed after employment.

**MINIMUM QUALIFICATIONS:** High School diploma or GED; one year of training or experience which includes responsibility for 3-D printing operations and machine shop operations; experience in hand and power tool operation, two years of training or experience in laboratory and/or machine shop procedures and equipment.

**REQUIRED CERTIFICATIONS, TRAINING, AND/OR LICENSURES:** None

**PHYSICAL REQUIREMENTS:** In accordance with the U.S. Department of Labor physical demands strength ratings, this position will perform light work.

**LIGHT:** work involves exerting up to 20 pounds of force occasionally, or up to 10 pounds of force frequently, or a negligible amount of force constantly to move objects, requiring: (1) walking or standing to a significant degree; (2) sitting most of the time while pushing or pulling arm or leg controls; or (3) working at a production rate pace while constantly pushing or pulling materials even though the weight or the materials is negligible. (The constant stress and strain of maintaining a production rate pace, especially in an industrial setting, can be and is physically demanding of a worker even though the amount of force exerted is negligible.)

**UNUSUAL WORKING CONDITIONS:** Not applicable