

## **Lab Technician & Design Assistant**

### **Summary**

To assist with the preparation and delivery of equipment and materials for the Science Department, auditing and maintaining safe practices, inventory, storage, and logistical distribution of experimental materials, chemicals and equipment to the laboratories in order to support teacher experiments in science lessons throughout the school. Supporting in class, assisting teachers and students in practical lessons where required, and ensuring the best learning experience for students.

Support the Design department by organizing equipment, material cleaning, and safety. Equipment maintenance: 3d printers, vinyl cutter, cnc and laser cutter. Helping to prepare materials for design lessons.

Reports to: Learning Leaders of Science and Design

### **Roles and Responsibilities**

#### **Safety**

- Ensure the safe and efficient operation of all science laboratories by maintaining, storing, and providing ready availability of equipment.
- Implement, monitor, and update Health and Safety procedures within the school, ensuring compliance with local and international safety standards, including CLEAPPs guidelines and apply these principles in all aspects of their duties.
- Conduct thorough and regular risk assessments for all practical activities, practical learning environments, chemical reagents, microbiological specimens, and equipment.
- Systematically test and inspect equipment and resources, maintaining meticulous records in accordance with Health & Safety protocols.
- Works with the site manager to oversee the safe disposal of chemical and hazardous materials in consultation with the Science Learning Leader and the Prevention of Risk Assessor
- Maintain science department Incident Report Log and keep this up-to-date.
- Clean tools: Clean equipment with special attention to glue guns and x-acto knives to make sure the equipment is safe to be used by staff and students.

#### **Material and Equipment Management**

- Design, construct, and modify simple apparatus and provide technical aids to support experimental activities.
- Prepare chemicals, solutions, and materials for all practical work in the science department.
- Manage the care of living organisms, including animals, aquaria, and plants within the Department as required.
- Be responsible for conducting regular inspections and maintenance of all laboratory and design equipment, including 3D printers, vinyl cutters, CNC machines, and laser cutters and
- Organize and oversee the repair of equipment as needed.
- Provide ongoing technical advice and support to teachers in integrating equipment and materials into the curriculum.
- Maintain the security, tidiness and good working order of the prep rooms and laboratories, including wiping down benches, cleaning glassware and moving apparatus.
- Clear equipment after use and tidying laboratories after lessons.
- Oversee stocktaking, ordering, and inventory control for both laboratory and design department, ensuring efficient procurement of materials, apparatus, equipment, and consumables in coordination with the Science Learning Leader.

- Manage the acquisition process for departmental needs, focusing on timely and cost-effective procurement, while meticulously overseeing financial accounts and maintaining strong supplier relationships for optimal resource allocation.
- Keep things organized: Materials boxes, clean and organize.
- Prepare material for classes: Cutting the big pieces of wood so students can manage them, cement preparation. (Design)
- Maintain Tools and organization.
- Manage deliveries and students project storage
- maintain equipment for science equipment and 3d printers, vinyl cutter, laser cutter, bandsaws, powertools for the design department

### **Curriculum Support and Professional Development**

- Support teaching staff to integrate practical experiments into the science curricula.
- Provide insights and technical expertise that enhance curriculum content with hands-on, experiential learning opportunities.
- Stay informed about current developments in science education to suggest relevant updates to experimental options for teachers.
- Initiate and maintain communication with external providers to explore and arrange external experiential learning opportunities that complement the science curriculum, in line with the school's Vision for Learning.
- Participate in departmental meetings, contributing valuable insights from a technical perspective, delivering technical training and ensuring clear communication between the department and technical staff.
- Playing an active and full part in the life of the school community attending field trips organized by the science and design department.
- Undertaking any other appropriate task requested by the line manager(s) or a senior colleague that is within the individual's abilities and falls under the role scope.
- Engage in ongoing professional development related to laboratory techniques, safety protocols, and emerging science education trends
- Develop and implement comprehensive safety protocols for all laboratory activities in consultation with the Science Learning Leader and conduct regular training sessions for staff
- Champion environmental sustainability within the department by promoting eco-friendly practices in laboratory management.
- Work with secondary school students on personal projects, internal assessments and extended essays by advising on experimental options and supporting their science or design equipment and chemical needs at breaks and lunches.

### **Skills and Requirements**

- Required: Relevant qualification in Science, Laboratory Technology, Health and Safety, Technology, Chemistry, or a related field.
- Desirable: Experience in a school environment and familiarity with science safety audit and risk assessment (example:CLEAPPS).
- Excellent organizational and time management skills, with the ability to handle multiple tasks efficiently.
- Proficiency in risk assessment procedures and maintaining a safe educational environment.
- Strong enthusiasm for supporting an experimental and hands-on approach in both the science and design departments.
- Ability to work collaboratively as part of a team, with a strong focus on service to staff and students.

- Excellent communication skills, able to effectively liaise with teachers, students, operational and school leadership staff.
- Adept at problem-solving and critical thinking, with an ability to adapt to changing situations and requirements.
- Proficiency with a range of IT software, including Google Apps, for effective management of documentation, communication, and inventory systems.
- Experience with LabLogger would be an advantage.
- Proficiency in maintaining and troubleshooting 3D printers, laser cutters, and vinyl cutters.
- Hands-on experience in resolving technical issues to ensure smooth machine operation.(Design)