

## **Biology Technician**

### **Job Description**

To provide the Biology teaching staff with technical support by setting up and maintaining apparatus and materials for scientific demonstrations and practical teaching.

Duties involve:

- **Facilitating and supporting practical work and teaching**
  - Preparing all practical experiments and activities to support science lessons
  - Providing technical assistance and health and safety advice for the safe provision of experiments to five teachers, students and trainee teachers to four laboratories
  - Organising systems and procedures for ordering, delivery and clearing of practicals
  - Safe delivery and secure storage of hazardous materials to laboratories for a safe working environment
  - Organisation and scheduling of resources, to avoid clashes of lessons and equipment
  - Advising academic staff within the school on the most suitable equipment and experiments and on practical work within lessons
  - Making up accurate and precise chemical solutions
  - Prepare biological cultures
  - Use organisational skills to prioritise workload and complete tasks to deadlines
  - Using scientific, technical and analytical skills and knowledge to investigate problems, draw conclusions, solve problems and make recommendations for improvements
  - Trialling experiments and apparatus to improve results and adapting new or one-off experiments
  - Assisting with demonstrations
  - Collecting, checking, fault-finding and returning apparatus and other resources to store
  - Use initiative to work without direct supervision and respond to unexpected problems
  - Using accurate and precise methodology and techniques for practical examination preparation
  
- **Health and Safety**
  - Assessing risks in accordance with CLEAPSS (Local education authority science advisory service) and COSHH (Control of Substances Hazardous to Health)
  - Careful movement and manoeuvring of heavily laden trolleys through corridors at busy times
  - Communicating health and safety issues and safety decisions to teaching staff, both science and non-science and pupils
  - Manage, monitor and review procedures
  - Providing advice and support on health and safety issues
  - Dealing with hazardous chemicals and advising staff on chemical hazards
  - Ensuring that all chemicals are labelled, with hazards where appropriate

- Managing the safe disposal and secure storage of used materials, new chemicals/substances and hazardous substances in accordance with legal and school requirements
  - Chemical spillage containment
  - Provision of PPE to staff for student use
  - Molecular biology management in relation to the risk of transferal of genetically modified material (recombinant DNA and transformed bacteria) from controlled laboratory conditions to the local environment
  - Microbiological management in relation to preparation and sterilization of equipment, preparation of microbial cultures, inoculation of the media, incubation of cultures, sterilization and safe disposal of all cultures
  - Electrical safety checks
- **Administrative Support**
    - Budgetary checking and record collation
    - Resource management – textbooks and equipment
    - Stocktaking of all equipment, chemicals and consumables
    - Health and Safety and Risk Assessment management
    - Timetable co-ordination in relation to practical provision
    - Centralizing (where appropriate) administrative procedures
    - Updating and maintaining practical sheets
    - Record keeping, inventories and legal records
    - Issuing text books using the library 'Eclipse' system
    - Checking and repairing textbooks
    - Assisting with the arrangements for photocopying when necessary
    - Updating AV material, DVD's etc.
- **Purchasing and stocktaking operations**
    - Stocktaking, ordering, checking deliveries and invoices
    - Liaise with suppliers representatives
    - Sourcing materials and supplier negotiations for best price
    - To cost new apparatus and equipment and suggest alternatives if expensive
    - Maintaining departmental accounts and budgets
    - Obtaining materials by local purchases
- **Maintenance of equipment**
    - Inspecting, cleaning and calibrating equipment and apparatus
    - Repairing or arranging the external repair of equipment
    - Constructing and modifying equipment
    - Maintenance of all specialized molecular biology equipment to include micropipettes, electrophoresis tanks, microfuges and vortex machinery
    - Maintenance and organisation of laboratories and preparation rooms
    - Microscope maintenance

**Other duties**

- Time management
- Assistance with the upkeep of the department's animals and plants
- Conservatory/Greenhouse care, maintenance and cultivation of plant material
- Support in relation to rooming and cover staff
- Effective communication and dialogue with other technicians and teaching staff about practical lessons and shared practices
- Liaising with professional bodies, CLEAPSS, Association of Science in Education (ASE)
- Communicating with other departments for maintenance purpose
- Provisions and equipment for science clubs for both senior and junior pupils
- Management of Enrichment opportunities for Young Biologist
- Organisation of equipment and activities for external 'Taster' days and Open days
- Managing subject specific poster boards
- Safeguarding responsibilities and attendance at the required training
- Attending Biology departmental meetings
- Attend start of term meetings
- Supervision of pupils during biology department trips
- Emergency First Aid
- Training instructions to less experienced Technician