

NESİBE AYDIN EDUCATIONAL INSTITUTIONS

GAZİANTEP CAMPUS

Laboratory Safety Policy

Sciences (Biology, Chemistry, Physics)

Effective Date: 01.03.2026

I. Purpose and Scope

This policy establishes the minimum safety requirements for all laboratory activities conducted in the science laboratories of Nesibe Aydın Educational Institutions, Gaziantep Campus.

It applies to all **IB Diploma Programme (IBDP) practical work**, including:

- laboratory lessons
- student projects
- Internal Assessment (IA) investigations
- science clubs and extracurricular activities
- preparation rooms and laboratory storage areas

The purpose of this policy is to create and maintain a safe laboratory environment for teachers, students, staff and visitors and to minimize the risk of injury, illness, accidents or damage to property.

This policy also supports **safe and responsible laboratory practices in accordance with IB Diploma Programme science requirements** and promotes a culture of safety, responsibility and ethical scientific inquiry.

For the purposes of this policy, a **laboratory** refers to any designated space where scientific or experimental activities are conducted using materials or equipment that may pose potential safety risks.

II. Oversight and Authorization

Laboratory safety is overseen by the **School Occupational Health and Safety Commission (OHSC)**.

The OHSC is supported by an **external occupational health and safety service provider authorized by the school**.

External OHS Service Provider:

Alfa LED Sistemleri Mühendislik İnşaat Ortak Sağlık Güvenlik Birimi Sanayi ve Ticaret Limited Şirketi

The OHSC may require changes to laboratory procedures or suspend activities when safety risks are not adequately controlled.

III. Roles and Responsibilities

Teachers, Students, Staff and Visitors

All individuals participating in laboratory activities share responsibility for maintaining a safe environment.

They must:

- comply with laboratory safety rules and school regulations
- complete required laboratory safety training
- follow all safety instructions during experiments
- use appropriate personal protective equipment (PPE)
- use laboratory materials and equipment responsibly
- immediately report accidents, hazards, or unsafe conditions

Students must never conduct laboratory work without teacher supervision.

All individuals are expected to contribute to maintaining a culture of safety and responsibility.

Laboratory Supervisor (Head of Science / Lab Manager)

The Laboratory Supervisor is responsible for ensuring safe laboratory conditions.

Responsibilities include:

- ensuring laboratories meet safety standards
- approving laboratory activities
- stopping unsafe laboratory work when necessary
- ensuring safety equipment is available and functional

Teacher (Activity Supervisor)

The teacher supervising laboratory activities must:

- provide safety instructions before experiments
- supervise students during laboratory work
- ensure students use PPE correctly
- enforce laboratory safety procedures
- approve student investigations and IA risk assessments

Technician / Laboratory Assistant (if available)

The laboratory technician assists by:

- preparing materials safely
- labeling chemicals properly
- supporting safe storage and disposal procedures

Department Leaders

Department leaders support the development of a strong safety culture.

They:

- ensure safety responsibilities are clearly assigned
- support teachers in implementing safety procedures
- assist in resolving laboratory safety issues

School Management

School management ensures that appropriate **facilities, equipment, infrastructure and resources** are available to maintain safe laboratories.

School Health and Safety Coordinator

The coordinator supports laboratory safety implementation by:

- assisting with safety training programs
- providing guidance on hazard identification
- monitoring compliance with laboratory safety procedures

IV. Core Student Laboratory Rules

Students must always follow these rules during laboratory work:

1. No unsupervised laboratory work. Enter laboratories only with teacher permission.
2. Follow all written and verbal instructions.
3. Do not improvise procedures or mix chemicals without approval.
4. No eating, drinking, chewing gum, cosmetics or phone use at laboratory benches.
5. Keep work areas clean and organized.
6. Know the location of emergency equipment (eyewash, fire extinguisher, exits, first aid kit).
7. Immediately report spills, injuries, equipment damage, or near-miss incidents.

V. Personal Protective Equipment (PPE)

Minimum PPE for laboratory work includes:

- safety goggles
- laboratory coat or apron
- closed-toe shoes

Additional PPE may include:

- gloves
- heat-resistant gloves
- face shields
- masks or respirators (when instructed)

Students must:

- tie back long hair
- secure loose clothing and jewelry

VI. Chemical Safety

All chemicals must be treated as potentially hazardous.

Students must:

- read chemical labels carefully
- use only teacher-provided chemicals
- never pipette by mouth
- never taste chemicals
- smell chemicals only using the wafting method if instructed
- use small quantities
- keep containers closed
- never return unused chemicals to stock bottles

When handling acids and bases:

- follow teacher instructions carefully
- add acid to water when required

If chemicals contact skin or eyes:

- rinse immediately with water
- notify the teacher immediately

VII. Heat, Flames, Glassware and Equipment

When working with laboratory equipment:

- use burners or hot plates only with teacher permission
- keep flammable materials away from heat sources
- assume heated equipment is hot
- use tongs or heat-resistant gloves
- check glassware for cracks before use
- dispose of broken glass in designated containers

Electrical safety rules:

- keep liquids away from electrical outlets
- use dry hands with electrical equipment
- report damaged cables immediately

VIII. Biological Safety (IBDP Biology)

Laboratory biological safety includes:

- no work with human blood or high-risk biological fluids
- following teacher instructions for microorganisms
- disinfecting laboratory surfaces before and after experiments

- washing hands after practical work

Sharps (scalpels, needles) may only be used **with teacher approval** and must be disposed of in a sharps container.

IX. Hazardous Materials

The purchase, handling, storage and disposal of hazardous materials must follow applicable safety regulations and school policies.

Hazardous materials must be:

- clearly labeled
- stored safely
- used only for educational purposes
- disposed of according to safety guidelines

X. Controlled Substances

Any laboratory activity involving controlled substances must comply with relevant legal regulations and school policies.

Such materials must be securely stored and documented.

XI. Precursor Chemicals and Equipment

Certain chemicals or equipment may require additional monitoring.

Teachers responsible for these materials must ensure they are:

- used only for educational purposes
- securely stored
- monitored appropriately

Any misuse, theft or loss must be reported immediately.

XII. Lasers, X-Rays and Radiation Sources

The use of specialized equipment such as lasers or radiation sources must comply with safety guidelines and applicable regulations.

Prior approval may be required before using such equipment.

XIII. Emergency Procedures

In the event of a laboratory emergency such as fire, chemical spill, injury, or equipment malfunction:

- stop work immediately
- notify the laboratory supervisor
- follow emergency procedures

Emergency equipment such as:

- fire extinguishers
- fire blankets
- eyewash stations
- safety showers
- first aid kits

must remain accessible at all times.

XIV. Laboratory Waste Disposal

Laboratory waste must be disposed of according to safety procedures.

Waste must be separated into appropriate containers such as:

- broken glass
- sharps
- chemical waste
- biological waste

Hazardous materials must **never be disposed of in sinks or regular waste bins** unless authorized.

XV. Risk Assessment for Investigations and IA

Before conducting laboratory investigations or **IB Internal Assessment (IA)** experiments, teachers must approve a **risk assessment** identifying:

- potential hazards
- risk level
- safety precautions and control measures
- required PPE
- supervision requirements

XVI. Laboratory Safety Plan

Each laboratory must maintain a laboratory-specific safety plan that includes:

- identification of hazards
- emergency procedures
- incident reporting procedures
- responsible personnel for laboratory safety

XVII. Policy Review

This policy will be reviewed periodically to ensure compliance with safety standards and school practices.

Updates may be made when necessary to improve laboratory safety procedures.

Appendices

Student Laboratory Safety Agreement

(Students must read and sign before participating in laboratory work)

NESİBE AYDIN EDUCATIONAL INSTITUTIONS
Gaziantep Campus
IB Diploma Programme (DP)

Student Laboratory Safety Agreement

Student Name: _____

Class / Grade: _____

Date: _____

Laboratory activities are an important part of science learning in the IB Diploma Programme. To ensure a safe learning environment, all students must understand and follow laboratory safety rules at all times.

By signing this agreement, I confirm that I understand and will follow the laboratory safety procedures outlined by my teacher and the school's Laboratory Safety Policy.

Student Responsibilities

I agree that I will:

- Follow all written and verbal laboratory safety instructions given by the teacher.
- Never conduct laboratory work without teacher supervision.
- Wear appropriate **personal protective equipment (PPE)** such as safety goggles and lab coats when instructed.
- Tie back long hair and secure loose clothing or jewelry during laboratory work.
- Never eat, drink, chew gum, or use mobile phones during laboratory activities.
- Handle chemicals, equipment, and materials carefully and responsibly.
- Never taste chemicals and never pipette by mouth.
- Immediately report accidents, spills, breakages, injuries, or unsafe conditions to the teacher.
- Use laboratory equipment only for its intended purpose.
- Follow waste disposal procedures as instructed by the teacher.
- Wash hands after laboratory activities.

I understand that failure to follow laboratory safety rules may result in removal from laboratory activities.



Student Declaration

I have read and understood the laboratory safety rules. I agree to follow these rules and act responsibly during all laboratory activities.

Student Signature: _____

Date: _____

Parent / Guardian Acknowledgment (recommended)

I understand that my child will participate in science laboratory activities and agree that they must follow the laboratory safety rules.

Parent / Guardian Name: _____

Parent / Guardian Signature: _____

Date: _____