

## Laboratory Science: - Skills for Work course

Course Level: National 5 Skills for Work Courses are designed to provide candidates with opportunities for developing.

- Skills and knowledge in a broad vocational area
- Core skills
- An understanding of the workplace
- Positive attitudes to learning
- Skills and attitudes for employability

The National 5 Laboratory Science Course consists of 4 units:

### **Working in a laboratory**

This Unit provides candidates with the opportunity to gain practical experience in measuring and weighing quantities, basic laboratory skills such as handling chemicals, preparing solutions and in calculating and presenting results of practical work. Safety and security procedures are addressed to enable candidates to maintain health and safety while working in a laboratory environment and a risk assessment is carried out. Opportunities arise for the development of numeracy and communication skills when recording and reporting practical work.

### **Practical Skills**

This Unit provides candidates with the opportunity to learn and develop the skills most commonly used in laboratories. The health and safety issues of working in a laboratory are integral to the Unit. Candidates will learn how to work safely with potentially hazardous materials such as microorganisms and will measure radioactivity, as well as developing competence in the use of various type of instrumentation found in laboratories. Skills in performing a titration are also developed.

### **Careers**

This Unit introduces candidates to the wide range of industries and services which use scientific knowledge and laboratory skills. Candidates will learn about the variety of ways in which science and laboratory skills are used in different industries and services and about the job roles which use these skills. Candidates will investigate a range of career opportunities within industries and services which use laboratory science and investigate the skills, qualifications and experience required for a job role of personal interest within a field of laboratory science.

### **Practical Investigation**

In this Unit candidates will work with others to produce a plan to investigate a scientific topic using practical procedures. Candidates working as part of a group will identify a hypothesis to investigate. Methods for testing the hypothesis using practical procedures are devised and tasks are allocated to each member of the group. Candidates will be assessed on their ability to carry out an allocated task competently and in a safe manner. Candidates will present their findings to members of the group and will produce a scientific report with their individual analysis and evaluation of the information gathered. Candidates will then review and evaluate their own and group contribution to the investigation.

