National 5 SfW Laboratory Science (Course Code: C781 75)

SCQF Level 5 (24 Credit Points)

Why study SfW Laboratory Science?

This course gives a broad practical introduction to laboratory science. You will explore a variety and range of industries and services, and the career opportunities in science laboratories in a local, national and global setting.

Laboratory technicians work in different sorts of labs. They work with scientists, to carry out experiments and record results. Animal technicians also work in laboratories, caring for animals used in research and, when qualified, helping with experiments.

Laboratory Science offers good opportunities for those who enjoy:

- learning practical and technical skills
- working as part of a team
- paying attention to detail
- being methodical
- observing and recording.

Career Pathways

To see what career areas this subject could lead to and the routes to get there, download and view these career pathways:

Animals, Land and Environment

Health and Medicine

Manufacturing Industries

Science and Maths

Uniformed and Security Services

What do I need to get in?

Entry is at the discretion of the school or college, however you should of achieved -

National 4 or National 5 Maths plus one of the following:

- National 4 Science, Biology, Chemistry or Physics
- National 5 Biology, Chemistry or Physics.

What will I study?

This course will give you practical experience in the basic practical skills for working in a laboratory, for example: measuring, weighing and preparing compounds and solutions and will help you to understand and apply the health and safety requirements for a safe working environment. You will develop specific practical skills related to microbiology, measuring radioactivity, chemical handling and laboratory instrumentation.

The course is made up of four compulsory units.

The compulsory units are:

- Careers Using Laboratory Science **OR** Careers Using Laboratory Science Scotland (6 SCQF credit points)
- Working in a Laboratory (6 SCQF credit points)
- Practical Skills (6 SCQF credit points)
- Practical Investigation (6 SCQF credit points)

You will learn about

- health and safety issues of working in a laboratory
- using various types of instrumentation found in laboratories
- the ways in which science and laboratory skills are used in different industries and services
- related job roles and career opportunities
- handling chemicals and preparing solutions
- calculating and presenting results of practical work
- employability skills such as timekeeping, taking instructions and measuring.

Working as a team you will also produce a plan to investigate a scientific topic using practical procedures. You will be assessed on your ability to carry out an allocated task in a competent and safe manner. You will present your findings and produce a scientific report.

Where will I take the course?

- You will usually train at a local college.
- Training sessions will take place for a set number of hours and weeks during term time.
- You will have to wear appropriate Personal Protective Equipment (PPE) on this course, for example: safety glasses and an overall.

Work experience/placements

Due to health and safety requirements it is not normally possible to arrange a science laboratory work experience placement for young people. However, where possible, you may be able to visit employers or training providers.

How will I be assessed?

Assessment will be based on an investigation, an open book assessment and your reviews of your employability skills.

Study Materials

What can I go on to next?

You may be able to progress to:

Employment /Training

- A Modern Apprenticeship in Life Sciences and the Related Industries at SCQF Level 6.

Further/Higher Education

- A one year full time NC or NQ in Applied Sciences at a local college of further education.

Further study, training or employment in:

- Animals, Land and Environment
- Health and Medicine
- Manufacturing Industries
- Science and Mathematics
- Uniformed and Security Services