

CAREERS INFORMATION



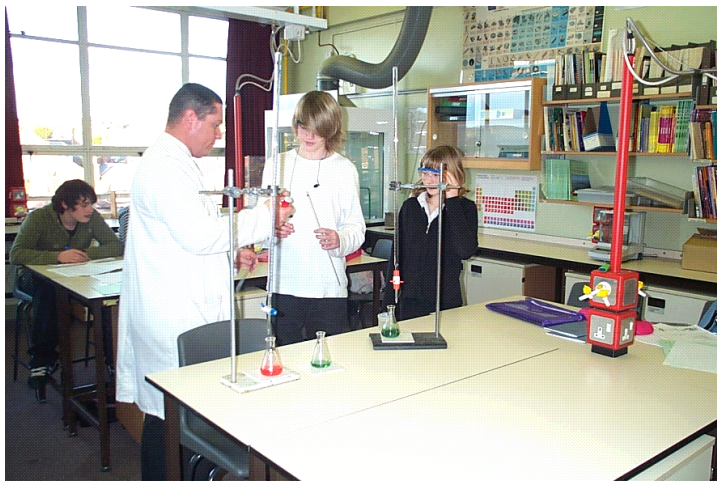
Career Areas

- Animals, Land and Environment
- Hairdressing & Beauty / Beauty
- Health and Medicine
- Manufacturing Industries
- Science and Mathematics / Chemistry / Food Science & Technology

Further advice and information on these options is available from your subject teacher, guidance teacher and careers adviser.

OTHER INFORMATION

STAFF:- Mr C Dubbels and Miss K Barnard



Science

Chemistry Advanced Higher



TURRIFF ACADEMY
Email: turriff.aca@aberdeenshire.gov.uk

COURSE INFORMATION

Why Chemistry?

Chemistry is vital to everyday life and allows us to understand and shape the world in which we live. You will learn about the applications of chemistry in everyday contexts such as medicine, energy and industry, as well as its impact on the environment and sustainability. You will learn how to think creatively and independently, and analyse and solve problems.

There are many career opportunities connected with chemistry, including medicine, veterinary work, medicinal chemistry, biochemistry, pharmacology, forensic science and chemical engineering.

Course Outline

Chemistry is a hands-on subject that develops your analytical thinking, and helps you to solve problems through experiments and research. You will learn about inorganic and physical chemistry, organic chemistry and instrumental analysis and how to carry out research in chemistry.

The course has three compulsory units, two of which are taught units and the third being partly taught plus a research project

Details of Course Components

Inorganic and Physical Chemistry

- electromagnetic radiation and spectroscopy
- atomic structure
- electronic configuration and the periodic table
- shape of molecules
- Transition metal chemistry
- chemical equilibria.
- Reaction feasibility
- reaction kinetics

Organic Chemistry and Instrumental Analysis

- structure of organic compounds
- organic reaction types and mechanisms
- synthesis of organic chemicals
- colour in organic compounds
- spectroscopic techniques
- medicines and drug interactions

Researching Chemistry:

- stoichiometric calculations
- practical techniques, including the related calculations
- research, plan and safely carry out a practical investigation

ASSESSMENT

Your work will be assessed by your teacher on an ongoing basis and by the SQA at the end of the course

- Question paper set by the SQA (100 marks)
- Project marked by the SQA (30 marks)

Your grade will depend on the total mark for all the units in your course.

PROGRESSION

Successful completion of this course may lead to:

- HND/degree programmes in a chemistry-based course or a related area, such as medicine, law, dentistry, veterinary medicine, engineering, environmental and health sciences
- careers in a chemistry-based discipline or related area, or in a wide range of other areas, such as oil and gas exploration, renewable energy development, engineering, technology, pharmaceuticals, environmental monitoring, forensics, research and development, management, civil service and education

FURTHER COURSES IN TURRIFF ACADEMY

None

