

# My World of Work

## OTHER INFORMATION

# Science

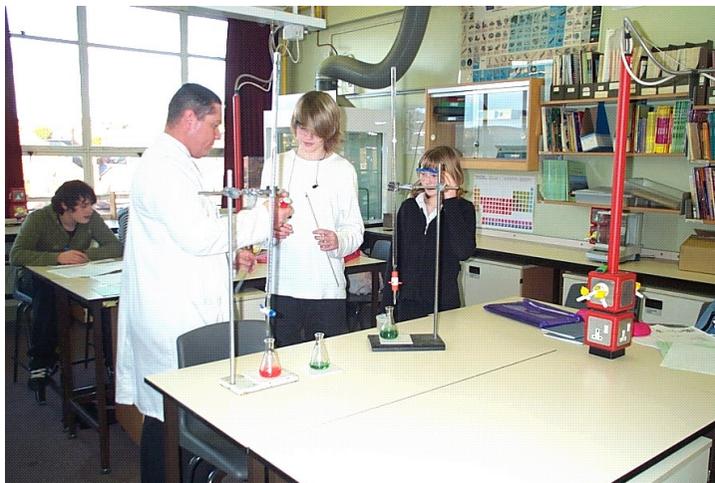
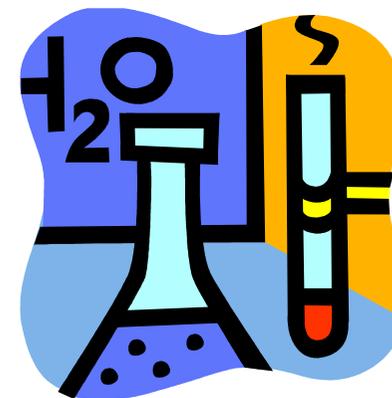
### Career Areas

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

Chemistry Staff:

Mr C Dubbels, Ms K Barnard and Mr S McNeil

## Chemistry Advanced Higher



TURRIFF ACADEMY  
Email: [turriff.aca@aberdeenshire.gov.uk](mailto:turriff.aca@aberdeenshire.gov.uk)

Useful websites to help you with your choices:

[www.myworldofwork.co.uk/](http://www.myworldofwork.co.uk/)

[www.skillsdevelopmentscotland.co.uk](http://www.skillsdevelopmentscotland.co.uk)

*Further advice and information on these options is available from your subject teacher, guidance teacher and*

# 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

- Experimental write-up (Outcome 1)
- Assessments covering knowledge and skills (Outcome 2)
- Question paper set by the SQA (100 marks)
- Project marked by the SQA (30 marks)

These arrangements will be subject to change by the SQA in April 2019

# 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

Higher Biology  
Higher Physics  
Advanced Higher Biology  
Advanced Higher Physics

Foundation apprenticeship: Scientific technologies

