

Biology

Higher

Recommended Entry Requirements

A to C at
National 5
Biology

Progression through Biology

Advanced
Higher
Biology

A pass at Higher level would provide access to study the subject at Advanced Higher or would provide a university entry level qualification.



Course Content

DNA and the genome

- structure of DNA
- replication of DNA
- gene expression
- cellular differentiation
- the structure of the genome
- mutations
- evolution
- genomic sequencing

Metabolism and survival

- metabolic pathways
- cellular respiration
- metabolic rate
- metabolism in conformers and regulators
- metabolism and adverse conditions
- environmental control of metabolism
- genetic control of metabolism

Sustainability and interdependence

- food supply, plant growth and productivity
- plant and animal breeding
- crop protection
- animal welfare
- symbiosis
- social behaviour
- components of biodiversity
- threats to biodiversity

Skills Developed

- demonstrating knowledge and understanding of biology by making accurate statements, describing information, providing explanations and integrating knowledge
- applying biology knowledge to new situations, analysing information and solving problems
- planning and designing experiments/practical investigations to test given hypotheses or to illustrate particular effects
- carrying out experiments/practical investigations safely, recording detailed observations and collecting data
- selecting information from a variety of sources
- presenting information appropriately in a variety of forms
- processing information (using calculations and units, where appropriate)
- making predictions and generalisations from evidence/information
- drawing valid conclusions and giving explanations supported by evidence/justification
- evaluating experiments/practical investigations and suggesting improvements
- communicating findings/information effectively

Assessment

Exam Paper 1

25 marks

Exam Paper 2

95 marks

Practical Assignment

20 marks

Related Careers

A qualification in biology can lead to careers in medicine,

- farming
- environmental protection
- sports science and many others.

Some famous faces who have Biology-related degrees include Steve Backshall, Mayim Bialik, Harry Hill, Lisa Kudrow and Ashton Kutcher!

