

## GCSE Biology

Study Mode: Part time | Course Level: 2

### Is this course right for me?

Science is a set of ideas about the material world and if you want to investigate, observe, experiment, test out ideas and think about them then this is the course for you!

This course will support you in building a deep understanding of science through talking about, reading and writing about science plus the actual doing, as well as representing science in its many forms both mathematically and visually through models.

Also, if you earn less than £30,000 per year and aged 19 or over, you could study this course for FREE! Take advantage of the new funding and #DoMore with your future.

### Entry Requirements

As this is a one-year intensive course you are required to have:

- GCSE Grade D in science OR
- Successful completion of a science diagnostic assessment

### What will I learn?

During this course you will study:

- Cell biology
- Infection and response
- Bioenergetics
- Homeostasis and response
- Inheritance, variation and evolution
- Ecology

### What skills will I gain?

By studying this course you will:

- Understand how scientific methods and theories develop over time
- Use a variety of models such as representational, spatial, descriptive, computational and mathematical to solve problems, make predictions and to develop scientific explanations and understanding of familiar and unfamiliar facts.
- Appreciate the power and limitations of science and consider any ethical issues which may arise.
- Explain every day and technological applications of science; evaluate associated personal, social, economic and environmental implications; and make decisions based on the

evaluation of evidence and arguments.

- Evaluate risks both in practical science and the wider social context, including perception of risk in relation to data and consequences.
- Recognise the importance of peer review of results and of communicating results to a range of audiences.
- Use scientific theories and explanations to develop hypotheses
- Plan experiments or devise procedures to make observations, produce or characterise a substance, test hypotheses, check data or explore phenomena.
- Apply a knowledge of a range of techniques, instruments, apparatus and materials to select those appropriate to the experiment.
- Carry out experiments appropriately having due regards to the correct manipulations of apparatus, the accuracy of measurements and health and safety considerations.
- Recognise when to apply a knowledge of sampling techniques to ensure any samples collected are representative.
- Make and record observations and measurements using a range of apparatus and methods.
- Evaluate methods and suggest possible improvements and further investigations.
- Present observations and other data using appropriate methods.
- Translate data from one form to another.
- Carry out and represent mathematical and statistical analysis.
- Represent distributions of results and make estimations of uncertainty.
- Interpret observations and other data, including identifying patterns and trends, making inferences and drawing conclusions.
- Present reasoned explanations including relating data to hypotheses.
- Being objective, evaluating data in terms of accuracy, precision, repeatability and reproducibility and identifying potential sources of random and systematic data.
- Communicate the scientific rationale for investigations, methods used, findings and reasoned conclusions through paper-based and electronic reports and presentations using verbal, diagrammatic, graphical, numerical and symbolic forms.

## **How will I be assessed?**

You will be assessed via two written exams of 100 marks each, lasting 1 hour - 45 minutes.

Questions consist of:

- Multiple choice
- Structure, closed short answer
- Open response

Practical competences are assessed through ten compulsory practicals during the course.

## **What can I do next?**

After you have successfully completed this course you can:

- Progress on to higher education, apprenticeships or employment.

## **Why study with us?**

You will carry out practical sessions in our well-equipped science labs and throughout the course will have the opportunity to go on science-related educational visits and field trips.

## Delivery

**Location:** Paget Road Campus

**Start Date:** 12/09/2024

**Day:**

**Time:**

**Course Fee:**

**Course Code:** Q1614

**Study Mode:** Part time

Apply online: [www.wolvcoll.ac.uk/apply](http://www.wolvcoll.ac.uk/apply)