

MEDICAL SCIENCE

What does this qualification cover?

Does the human body, how it works and what goes wrong within it to bring about pathology and disease fascinate you? Ever wondered why some people are more susceptible to cancers? Ever pondered how that pill the doctor prescribed you works? Are you interested in medicine or related career routes? Then this is these are the courses for you!

These courses are designed to give you the knowledge, understanding and skills in key scientific principles that underpin medical sciences and support your progress into higher education or employment within the sector.

Certificate – ½ A Level equivalent

Students gain an exciting and fascinating insight into the anatomy and physiology of the human body, an understanding of how organ systems function within the body and some problems that can occur within those systems to bring about disease. You will learn about the huge impacts that lifestyle can have on these systems and how systems react to this.

The course allows students to explore the principles behind ways that body functions can be measured and how the results of these tests are used to make diagnoses and treatment plans. You will perform these tests yourself, interpret results and link your findings to disorders. You will have the opportunity to plan, conduct and report research in an area of medical science, gaining the necessary skills and knowledge along the way to obtain information and draw meaningful evidence-based conclusions from your findings.

Diploma – 1 A Level equivalent

This larger qualification includes all the components of the Certificate and builds on the knowledge gained. Additional content includes developing a knowledge and understanding of the science of medicines and how they work, cancer and its genetic links and the range of treatments available. You will be able to give information to a range of audiences about how medicines and effective treatments work.

In the Clinical Laboratory Techniques unit you will learn more about techniques medical scientists can use to assess body functions, physiology and biochemistry building up to a medical case that connects the dots of all of the learning before it and apply the skills, techniques, knowledge and understanding of concepts in analysing a case study, developing a thorough assessment of a condition.

The content is divided into six modules:

Certificate

Human health and disease
Physiological measurement techniques
Medical science research methods

Diploma (extra 3 units)

Medicines and treatment of disease
Clinical laboratory techniques
Medical case study

All the units with each route are mandatory and you must study the units within the Certificate to allow awarding of the diploma after successfully completing the additional units.

Key Features

Interesting and challenging learning experience linking how the body works to what happens in disease and how medicines work.

Developing transferable skills that are useful outside of scientific study and directly applicable to the world of work including:

- Investigative skills
- Problem solving
- Research
- Mathematical and analytical skills
- Communication skills

Study of all the major organ systems in health and disease. Opportunity for hands-on learning of taking physiological measurements and interpreting their meaning. Developing mathematical and statistical analysis skills to draw meaningful conclusions from your measurements.

These skills are easily transferable to other employment sectors and will enhance any CV.



Links to workplace

By choosing to study L3 Applied Cert/Dip Medical Science as part of your programme of study you will gain access to a wide range of potential courses or employments at University related to the health sciences. Biomedical sciences or life sciences and medical and health related industry sectors.

Jobs within health care open to you on completion of the course include:

- Laboratory testing to support patient diagnosis
- Scientific testing to support disease research
- Direct work with patients, measuring and evaluating organ function

And many other potential careers.



Assessment

Certificate

Unit 1 - Human health and disease (50% of the Certificate). External two hour exam based on previously seen and studied material.

Unit 2 – Physiological measurement techniques (25%). Marked by your tutor.

Unit 3 – Medical science research methods (25%). Marked by your tutor.

Diploma

Unit 1 – 25%, Unit 2 and 3 12.5% each

Unit 4 – Medicines and treatment (25%)
Marked by your tutor.

Unit 5 – Clinical laboratory techniques (12.5%). Marked by your tutor.

Unit 6 – Medical case study (12.5%).
External 90 minutes exam.