

Medical Science Certificate / Diploma

Fast-track course

This fast-track course can only be chosen as a fourth course and is delivered with half the class contact as a core A Level. Students choosing this course will be considering a medical career. This course can be studied for one or two years.

What the course covers

The Certificate in Medical Science is equivalent to half an A Level (the diploma is equivalent to a full A level). The course deals with the maintenance of health and the prevention and treatment of diseases. Learners will acquire the knowledge, understanding and skills in key scientific principles to support progress to higher education or employment in areas such as physiological sciences or clinical laboratory services. The full diploma qualification has six units.

Unit 1: Human health and disease

Students will develop knowledge and understanding of human anatomy and physiology, and of the function of organ systems and some problems that can occur in these systems.

Unit 2: Physiological measurement techniques

Students examine physiological measurements that can be made to assess the function of major body systems. The unit relates anatomy and physiology to physiological measurement test results, through an understanding of the principles of the measurement techniques.

Unit 3: Medical science research methods

This unit develops knowledge and understanding of planning, conducting and reporting of research in medical sciences using a range of methodologies and techniques.

Unit 4: Medicines and treatment of disease

This unit looks at the science of medicines, and how they work through their interactions with body systems. It also introduces cancer, its relationship to genetics, and the range of therapeutic treatments available.

Unit 5: Clinical laboratory techniques

This unit looks at clinical laboratory techniques that can be used to assess body functions. It relates knowledge of human physiology and biochemistry to clinical measurement test results through an understanding of the principles of the measurement techniques.

Unit 6: Medical case study

This is a synoptic exam based upon the content of all units in the qualification. The exam questions will be based upon three case studies and will require students to integrate their knowledge, understanding and skills developed through the other units.

The complete specification can be viewed on the WJEC website. www.wjec.co.uk

What students can do with this course

For many students this course will provide a foundation of medical knowledge that will support an application to a medical degree.

Medical scientists are at the forefront of healthcare services, as they are vital in the diagnosis of disease, determining the effectiveness of treatments and searching for new cures. This Diploma will enable progression to higher education to a range of Applied Science programmes, such as biomedical science, life sciences, and physiology.

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How this course is assessed

- Unit 1: Human Health and Disease (external assessment)
- Unit 2: Physiological measurement techniques (internally assessed)
- Unit 3: Medical Science research methods (internally assessed)
- Unit 4: Medicines and treatment of disease (internally assessed)
- Unit 5: Clinical laboratory techniques (externally assessed)
- Unit 6: Medical case study

Entry requirements

As this course is taken as a fourth option it is expected that students will significantly exceed the minimum entry requirements for their core courses.

All our course entry requirements are detailed in the Entry Requirements document located in the admissions section of our website.