

What is Medical Science?

Medical Science is the science of dealing with the maintenance of health and the prevention and treatment of diseases. This qualification covers the key topic areas of health, physiology and disease, as well as providing the opportunity to study the areas of physiological measurement and medical research not covered in the biology specification.

Why students choose this course

Students choose to follow this course if they are wishing to pursue a career in medicine or dentistry and want to add something extra to their A Level profile.

It broadens the experience of students and directly references the work of healthcare practitioners in the NHS as students develop an understanding of conduct and confidentiality alongside the anatomy, physiology and pathology of the human body.

Students that study medical science must be very self-motivated and able to manage their time effectively as the course is taught in half the time of a core A level.

What the course covers

This fast-track course is equivalent to half an A level.

Unit 1: Human health and disease.

Students will develop knowledge and understanding of human anatomy and physiology, and of the function of organ systems. They will also begin to learn about the pathology of these body systems as they study infectious and non-infectious disease.

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. Such tests include peak flow, ECG and using a digital sphygmomanometer to measure blood pressure.

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. This is linked to a current hot topic in healthcare.

The complete specification can be viewed on the WJEC website. <https://www.wjec.co.uk>

What students can do with this course

This fast-track course can only be chosen as a fourth course and as mentioned earlier, is delivered with half the class contact of a core A Level. Students will receive an A level equivalent qualification in the summer of year 12. Students choosing this course will be considering a career in medicine or dentistry.

This course is not accepted as a qualification in its own right for medicine.

How this course is assessed

All assessment takes place in year 12:

Unit 1 - 1.5 hour externally assessed written examination (50% of the marks). This paper is synoptic and covers each of unit 1-3 with an emphasis on unit 1 (a maximum of 93% of the total marks).

Units 2 & 3 - internally assessed timed controlled assessment (50% of the marks - 25% per assessment)

Entry requirements

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

Further Reading

For information on healthcare careers:

<https://www.healthcareers.nhs.uk/explore-roles>

For information on disease:

<https://www.nhs.uk/conditions>

Student Profile:



Before Sixth Form, Rayan was a student at Dixons Macmillan. At Dixons Sixth Form, she studied Biology, Chemistry, Maths and Medical science and has gone on to study Biomedical science at Northumbria University



I enjoyed every lesson of medical science. I studied two aspects to medical science: practical and theoretical. I learnt about the anatomy of human body and how communicable and non-communicable diseases affect the body's function. Alongside this, I also learnt how to perform basic diagnostic examinations on patients like measuring their blood pressure using a sphygmomanometer, whilst being assessed doing these tests. I also created a questionnaire to ask my patients about their physical and mental health and take a patient history. I was able to about this experience in my personal statement for my UCAS application. It is a great course to show your practical skills

