

Specialist Qualification in Medical Science



Entry Criteria:

- Five GCSE's at Grade 4 or above
- One of the five to be GCSE Mathematics or English at Grade 4 or above
- Double Award Science with Grades 4-4 or above.

Coursework/Examination Requirements: The course is made up of six units, one examination unit, three task based internal assessment units, one task based external assessment unit and one synoptic assessment.

Awarding Body/Specifications: WJEC Applied Certificate/Applied Diploma in Medical Science. Students will be awarded A* to E by the points gained for the successful achievement of individual units.

Specialist Qualification (equivalent to one A Level): Medical Science is the science of dealing with the maintenance of health and the prevention and treatment of diseases. 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. **The following units will be covered on this course:**

Year 12

Unit 1 – Human Health and Disease

This unit develops knowledge and understanding of human anatomy and physiology. It will help you develop an understanding of the function of organ systems and some problems that can occur in these systems.

Unit 2 – Physiological Measurement Techniques

This unit develops knowledge and understanding about the physiological measurements that can be made to assess the function of major body systems. It 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.

Year 13

Unit 4 – Medicine and Treatment of Disease

This unit develops knowledge and understanding about 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

You will learn about the clinical laboratory techniques that can be used to assess body functions. It relates knowledge and understanding 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 unit is the overall synoptic unit for the Diploma qualification. It provides the opportunity for candidates to demonstrate their understanding of the connections between the other five units of this Medical Science qualification.

Specialist Qualification Applied Certificate: If you choose to study this subject for one year only, you will be awarded the Certificate (equivalent to an AS Level). You will cover Units 1, 2 and 3 and sit public examinations in Year 12. Unit 1 will be an examination (worth 50%) and Units 2 and 3 will be coursework assessed.

Progression: This course supports employment in physiological sciences or clinical laboratory services and can give access to Higher Education courses such as Physiotherapy, Occupational Therapy, Health and Speech Therapy and Social work. Opportunities for university and degree apprenticeships are supported by this program.

Opportunities: We hope to make site visits in order to view and use specialist medical equipment.