|  |  |
| --- | --- |
| A picture containing clipart  Description automatically generated**YEAR 12 Medical Science**  **‘An ambitious curriculum that meets the needs of all’**  **Medium Term Planning - Topic: Unit 2** | |
| **Curriculum Intent** | **In addition to working further on objectives from Year 12, pupils will be taught, following National Curriculum guidelines, the following this term:**  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.  The unit will enable learners to perform tests which will accurately measure a range of  physiological functions. They will be able to interpret the results of these tests and other  tests and link this to possible physiological disorders.  Physiological measurements play a very important role in the diagnosis and treatment of  patients in a range of clinical settings. What simple clinical measurements can be carried  out? How are complex measurements carried out? How do we know what measurement to select?  When physiological measurements are carried out - such as measuring temperature, pulse rate or respiration rate – healthcare professionals are monitoring for signs of abnormality (i.e. anything that falls outside of the 'normal' range). Health professionals will then be able to draw conclusions about the health status of the individual and evaluate any treatments they may require. Most healthcare scientists involved with physiological measurement work in hospital clinics and departments or as part of surgical teams.  This unit is designed to help you understand how healthcare scientists who work in  physiological sciences, investigate the function of body systems by undertaking physiological measurements. This involves using specialist equipment, advanced technologies and a range of different procedures. |
| **Skills/National Curriculum Links** |
| **Cross Curricular Links** | **SMSC/PSHE:** The specification provides a framework and includes specific content through which individual courses may address spiritual, moral, ethical, social and cultural issues. It aims to show how science can be used to assist in understanding the underlying  causes of disease. Learners should consider how conditions are treated, and  balance the need for new treatments with cost to society.  Examples of issues which can be addressed through the specification are listed  below.  • How lifestyle may affect health (unit 1)  • How ethical issues affect research (unit 3)  • How factors are considered when prescribing medicines (unit 4)  **Literacy:** key words and terms linked to topics, command words when answering exam questions.  **Numeracy:** ability to read graphs, tables, plot data, values etc  **Skills Builder:** leadership, teamwork, listening to others, collaborating |
| **Becoming future ready** | The applications and implications of science are dealt with in meaningful medical  contexts, and encourage the development of a responsible attitude to citizenship. An  understanding that individuals have a collective responsibility is fostered in relation to  various ethical issues included in the specifications such as treatment regimens, side  effects of medicines, cost of medicines to society. The consequences of lifestyle on  health are also examined throughout the qualification in a number of different  contexts.  **Health and Safety Consideration**  Under UK law, health and safety is the responsibility of the employer. There are a  number of regulations (notably Management of Health and Safety at Work  Regulations 1999 and COSHH Regulations 2002 (as amended)) that require the  completion of a risk assessment before commencing a procedure or activity that uses  microorganisms or chemicals.  There are opportunities for learners to develop their own risk assessments when  carrying out laboratory work in almost all units. Throughout the qualification there are  also many opportunities to underscore the requirement to work in compliance with  risk assessments in order to safe guard the health and safety of workers and  members of the public.  **The European Dimension**  Medical issues can be rarely confined to a particular place since human actions in one  country can also impact another. Challenges faced by medicine also need to be dealt  with at national, European and global levels. This specification should make learners  aware that medical scientists need to cooperate with scientists from other countries.  The context led nature of the units will give centres the opportunity of examining  medical issues at a European level. Examples where a European dimension can be  underscored include international protocols and European legislation relating to  adverse drug reactions and licencing of medicinal products for human use. |
| **Adaptation** | Throughout this topic, quality first teaching will provide differentiation:  **By product:** written information on learning mats, some through practical setting.  **By resource:** textbooks, videos, learning mats, handouts to read through, graphs, tables and charts.  **By Intervention**: by providing different levels of supervision and support  **By Progressive Questioning:** exploring pupils’ understanding through interactive dialogue.  **By Grouping:** according to prior attainment, gender, social preference, preferred learning style.  **By Task:**Pupils should be involved in the identification of targets which are meaningful to them and in the selection of an appropriate task from the given range.  **By Offering Optional Activities:** In class or as homework, to extend learning.  This QFT/SEND provision will be explicit within the lesson-by-lesson schemes of work. |
| **QFT/SEND Provision** |
| **Implementation**  **Curriculum Delivery** | **AC1.1** explain principles of physiological measurement tests  **AC1.2** explain significance of data obtained from physiological measurements  **AC1.3** describe limitations of physiological measurement testing  **AC2.1** explain importance of patient confidentiality  **AC2.2** describe conduct towards patients  **AC3.1** plan to perform physiological measurement tests  **AC3.2** use physiological testing equipment  **AC3.3** record results from physiological measurement tests  **AC4.1** process data from physiological measurement tests  **AC4.2** make evidence based conclusions about the “health” of individuals  **AC4.3** evaluate information from physiological measurement tests  **AC4.4** communicate in writing |
| **Learning Outcomes (Knowledge)** |
| **Current learning to be developed in the future within:** | Unit 1 and 6 exam |
| **Assessment** | Refer to assessment maps for formative and summative assessment opportunities. |
| **Impact** | Attainment and Progress – Refer to assessment results / data review documentation. |