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| **What will we be learning?**  **Unit RO43 – The body’s response to physical activity** | **Why this? Why now?**  This unit is a compulsory coursework unit for the Sport Science course. This unit is taught in Year 11 as it is uses data collected from unit RO42 from Year 10. | **Key Words:**  Musculo-skeletal system  Cardio-respirtory system  Synovial joints  Connective tissue  Concentric contraction  Eccentric contraction  Blood pressure  Vascular shunt mechanism  Aerobic and anaerobic respiration |
| **What will we learn?**  **LO1 - Know the key components of the Musculo-skeletal and cardio-respiratory systems and their functions**  **LO2 – Understand the importance of the Musculo-skeletal and cardiorespiratory systems in health & fitness**  **LO3 – Be able to assess the short term effects of physical activity on the musculo-skeletal and cardio-respiratory systems**  **LO4 - Be able to assess the long term effects of physical activity on the musculo-skeletal and cardio-respiratory systems** | |
| **What opportunities are there for wider study?**  **Sixth form studies**   * Cam Tech Sport * A level PE   **Careers/degree courses**   * Sports science * Physiotherapy * PE teacher | |
| **How will I be assessed?**   * Set OCR assignments under teacher supervision | |

**CAM NAT – SPORT SCIENCE**

**UNIT RO43**

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| **LO1 - KNOW THE KEY COMPONENTS OF THE MUSCULO-SKELETAL AND CARDIO-RESPIRATORY SYSTEMS AND THEIR FUNCTIONS**  **Key components**   * Major bones & skeletal muscle groups * Synovial joints * Connective tissue * Functions of the Musculo-skeletal system * Heart * Respiratory system * Blood & Blood vessels * Functions of the cardio-respiratory system   **Roles**   * Types of movement & functions of connective tissue * Muscle contractions * Heart rate & blood pressure * Vascular shunt mechanism * Breathing mechanism & internal respiration * Aerobic and anaerobic respiration |  |
| **LO2 – UNDERSTAND THE IMPORTANCE OF THE MUSCULO-SKELETAL & CARDIORESPIRATORY SYSTEMS IN HEALTH & FITNESS**   * Benefits of cardio-respiratory fitness in everyday life * Benefits of muscular strength and flexibility * Benefits of muscular endurance |  |
| **LO3 – ASSESS THE SHORT TERM EFFECTS OF PHYSICAL ACTIVITY ON THE MUSCULO-SKELETAL & CARDIO-RESPIRATORY SYSTEMS**   * Changes to systems * Suitable activities to measure the short term effects * Methods to measure the short term effects * Recording the outcomes |  |
| **LO4 – ASSESS THE LONG TERM EFFECTS OF PHYSICAL ACTIVITY ON THE MUSCULO-SKELETAL & CARDIO-RESPIRATORY SYSTEMS**   * Changes to systems * Suitable activities to measure the long term effects * Methods to measure the long term effects * Recording the outcomes and subjective measures |  |