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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 systemCardio-respirtory systemSynovial jointsConnective tissueConcentric contractionEccentric contractionBlood pressureVascular shunt mechanismAerobic 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
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| **How will I be assessed?*** Set OCR assignments under teacher supervision
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**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
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| **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
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| **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
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| **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
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