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| **What will we be learning?**   * **Anatomy and Physiology** | **Why this? Why now?**  This unit is a compulsory for the A level course which will be examined through the H555/01 paper at the end of year 13. | **Key Words:**  Skeleton  Muscle  Bone  Ligament  Tendon  Action potential  Lungs  Ventilation  Heart  Blood vessels  Aerobic  Anaerobic  Lactic acid  ATP-PC  Glucose  Glycolysis  Electron transport chain  Beta Oxidation  Acclimatisation |
| **What will we learn?**   * 1. **Skeletal and muscular systems**   2. **Cardiovascular systems**   3. **Respiratory Systems**     **7.1 Energy for Exercise**  **7.2 Environmental effects on the Body** | |
| **What opportunities are there for wider study?**  **Optional Booster sessions**  **Careers/degree courses**   * Sports science * Physiotherapy * PE teacher * Sports analysis | |
| **How will I be assessed?**   * Everlearner set assignments/check points * Topic tests * End of unit tests * Mock Exams | |

**A LEVEL PE**

**ANATOMY & PHYSIOLOGY**

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| **What will we learn?**  **1.1 Skeletal and muscular systems**   * The Bones and joints of the skeleton * The roles of muscles * Movement analysis * Motor unit and muscle fibre type | 11 functions of the muscular system: Diagrams, facts, and structure |
| * 1. **Cardiovascular systems** * Structure of the heart * Cardiac conduction system * H.R, SV, Q * Cardiac response to exercise * HR Regulation * Blood vessels * Venus return * Redistribution of Q * Vascular Shunt |  |
| * 1. **Respiratory Systems** * Structure of the airways and lungs * Gas transport * Minute ventilation * Lung volumes * Mechanics of breathing * Respiratory regulation * Gaseous exchange * Bohr Shift | Respiratory Therapy | Southern University Shreveport Louisiana |
| **7.1 Energy for Exercise**   * ATP PC * Glycolytic system * Aerobic system * Krebs Cycle * ETC * Free Fatty Acids * ATP Resynthesis * Recovery times * EPOC * Alactacid * Lactacid * Implications of recovery on training | Phone Battery Icon Vector Art, Icons, and Graphics for Free Download |
| **7.2 Environmental effects on the Body**   * Effects of Altitude on CV and respiratory system * Acclimatisation * Exercise in the heat * Effect on performance | Is Training at Altitude Worth It for Athletes? |