|  |  |  |
| --- | --- | --- |
| **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:**SkeletonMuscleBoneLigament TendonAction potentialLungsVentilationHeartBlood vesselsAerobicAnaerobicLactic acidATP-PCGlucoseGlycolysisElectron transport chainBeta OxidationAcclimatisation  |
| **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**

|  |  |
| --- | --- |
| **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? |