

## AQA A-Level Physical Education – PLC

| 3.2.1 Exercise physiology   |  |
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| 3.2.1.1 Diet and nutrition and their effect on physical activity and performance                      |  |
| <b>Understand the exercise-related function of food classes.</b>                                      | <ul style="list-style-type: none"> <li>• Carbohydrate</li> <li>• Fibre</li> <li>• Fat (saturated fat, trans fat and cholesterol), protein, vitamins (C, D, B-12, B-complex), minerals (sodium, iron, calcium), water (hydration before, during and after physical activity).</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>   |
| <b>Positive and negative effects of dietary supplements/ manipulation on the performer.</b>           | <ul style="list-style-type: none"> <li>• Creatine, sodium bicarbonate, caffeine, Glycogen loading</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>  |
| 3.2.1.2 Preparation and training methods in relation to maintaining physical activity and performance |  |
| <b>Understanding of the key terms relating to laboratory conditions and field tests.</b>              | <ul style="list-style-type: none"> <li>• Quantitative and qualitative</li> <li>• Objective and subjective</li> <li>• Validity and reliability</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>  |
| <b>Physiological effects and benefits of a warm up and cool down.</b>                                 | <ul style="list-style-type: none"> <li>• Stretching for different types of physical activity (static and ballistic)</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>  |
| <b>Principles of training.</b>  | <ul style="list-style-type: none"> <li>• Specificity, progressive overload, reversibility, recovery, Frequency Intensity Time Type of Training (FITT) principles.</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>  |
| <b>Application of principles of periodisation</b>   | <ul style="list-style-type: none"> <li>• Macro cycle, Meso cycle, Micro cycle</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>  |
| <b>Training methods to improve physical fitness and health.</b>                                       | <ul style="list-style-type: none"> <li>• HIIT/ interval training (anaerobic power)</li> <li>• Continuous training (aerobic power)</li> <li>• Fartlek (aerobic power)</li> <li>• Circuit training (muscular endurance)</li> <li>• Weight training (strength)</li> <li>• Proprioceptive Neuromuscular Facilitation (PNF) (flexibility)</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div> |
| 3.2.1.3 Injury prevention and the rehabilitation of injury  |  |
| <b>Types of injury.</b>   | <ul style="list-style-type: none"> <li>• Acute (fractures, dislocations, strains, sprains)</li> <li>• Chronic (Achilles tendonitis, stress fracture, 'tennis elbow')</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>   |

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| <p><b>Understanding different methods used in injury prevention, rehabilitation and recovery.</b></p> | <ul style="list-style-type: none"> <li>• Injury prevention methods:</li> <li>• Screening</li> <li>• Protective equipment</li> <li>• Warm up, flexibility training (active, passive, static and ballistice), taping and bracing</li> <li>• Injury rehabilitation methods (proprioceptive teaining, strength training, hyperbaric chambers, cryotherapy, hydrothearapy)</li> <li>• Recofery from exercise (compression garments, massage/ foam rollers, cold therapy, ice bath, cryotherapy)</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div> |
| <p><b>Physiological reasons for methods used in injury rehabilitation.</b></p>                        | <ul style="list-style-type: none"> <li>• Hyperbaric chambers, cryotherapy</li> </ul> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>  |
| <p><b>Importance of sleep and nutrition for improved recovery.</b></p>                                | <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>   |