

Year 11 GCSE PE Revision List

Paper 1

Topic 1: Applied anatomy and physiology

3.1.1.1 The structure and functions of the musculoskeletal system

- Bones
- Structure of the skeleton
- Functions of the skeleton
- Muscles of the body
- Structure of a synovial joint
- Types of free movable joints that allow different movements
- How joints differ in design to allow movements at a joint
- How the major muscles and muscle groups of the body work antagonistically on the major joints of the skeleton to affect movement in physical activity at the major movable joints

3.1.1.2 The structure and functions of the cardiorespiratory system

- Pathway of air
- Gaseous exchange
- Blood vessels
- Structure of the heart
- Cardiac cycle and pathway of blood
- Cardiac output, stroke volume, heart rate
- Mechanics of breathing
- Interpretation of a spirometer trace

3.1.1.3 Anaerobic and aerobic exercise

- Understanding the terms aerobic exercise (in the presence of oxygen) and anaerobic exercise (in the absence of enough oxygen)
- The use of aerobic and anaerobic exercise in practical examples of differing intensities
- Excess post-exercise oxygen consumption (EPOC)/oxygen debt as the result of muscles respiring anaerobically during vigorous exercise and producing lactic acid
- The recovery process from vigorous exercise

3.1.1.4 The short- and long- term effects of exercise

- Immediate effects of exercise (during exercise)
- Short-term effects of exercise (up to 36 hours after exercise)
- Long-term effects of exercise (months and years of exercising)

Topic 2: Movement analysis

3.1.2.1 Lever systems

- First, second and third class lever systems within sporting examples
- Mechanical advantage – an understanding of mechanical advantage in relation to the three lever systems
- Analysis of basic movements in sporting examples

3.1.2.2 Planes and axes of movement

- Identification of the relevant planes (frontal, transverse, sagittal) and axes (longitudinal, transverse, sagittal) of movement used whilst performing sporting actions

Topic 3: Physical training

3.1.3.1 The relationship between health and fitness and the role that exercise plays in both

- Health and fitness
- The relationship between health and fitness

3.1.3.2 The components of fitness, benefits for sport and how fitness is measured and improved

- The components of fitness
- Linking sports and physical activity to the required components of fitness
- Reasons for and limitations of fitness testing
- Measuring the components of fitness
- Demonstration of how data is collected for fitness testing

3.1.3.3 The principles of training and their application to personal exercise/ training programmes

- The principles of training and overload
- Application of the principles of training
- Types of training
- Identification of the advantages and disadvantages (the effects on the body) of training types linked to specific aims

3.1.3.4 The long-term effects of exercise

- Calculating intensities to optimise training effectiveness
- Considerations to prevent injury
- Specific training techniques – high altitude training as a form of aerobic training
- Seasonal aspects

3.1.3.5 Effective use of warm up and cool down

- Warming up and cooling down

Paper 2

Topic 1: Sport psychology

3.2.1.1 Classification of skills (basic/ complex, open/closed)

- Skill and ability
- Classifications of skill
- Definitions of types of goals

3.2.1.2 The use of goal setting and SMART targets to improve and/or optimise performance

- The use and evaluation of setting performance and outcome goals in sporting examples
- The use of SMART targets to improve and/or optimise performance

3.2.1.3 Basic Information Processing

- Basic information processing model

3.2.1.4 Guidance and feedback on performance

- Identify examples of, and evaluate, the effectiveness of the use of types of guidance, with reference to beginners and elite level performers

- Identify examples of, and evaluate, the effectiveness of the use of types of feedback, with reference to beginners and elite level performers

2.4 Mental preparation for performance

- Arousal
- Inverted-U theory
- How optimal arousal levels vary according to the skill being performed in a physical activity or sport
- How arousal can be controlled using stress management techniques before or during a sporting performance
- Understand the difference between direct and indirect aggression with application to specific sporting examples
- Understand the characteristics of introvert and extrovert personality types, including examples of sports which suit these particular personality types
- Definition of intrinsic and extrinsic motivation, as used in sporting examples
- Evaluation of the merits of intrinsic and extrinsic motivation in sport

Topic 2: Socio-cultural influences

3.2.2.1 Engagement patterns of different social groups in physical activity and sport

- Engagement patterns of different social groups and the factors affecting participation

3.2 Commercialisation of physical activity and sport

- Commercialisation
- Types of sponsorship and the media
- Positive and negative impacts of sponsorship and the media
- Positive and negative impacts of technology

3.3 Ethical and socio-cultural issues in physical activity and sport

- Conduct of performers
- Prohibited substances
- Prohibited methods (blood doping)
- Drugs subject to certain restrictions (beta blockers)
- Which type of performers may use different types of performance enhancing drugs (PEDs) with sporting examples
- The advantages and disadvantages for the performer of taking PEDs
- The disadvantages to the sport/event of performers taking PEDs
- Spectator behaviour (the positive and the negative effects of spectators at events)
- Reasons why hooliganism occurs
- Strategies employed to combat hooliganism/ spectator behaviour

Topic 3: Health, fitness and well-being

3.2.3.1 Physical, emotional and social health, fitness and well-being

- Linking participation in physical activity, exercise and sport to health, wellbeing and fitness, and how exercise can suit the varying needs of different people

3.2.3.2 The consequences of a sedentary lifestyle

- The consequences of a sedentary lifestyle
- Obesity and how it may affect performance in physical activity and sport
- Somatotypes

3.2.3.3 Energy use, diet, nutrition and hydration

- Energy use
- Nutrition – reasons for having balanced diet
- Nutrition – the role of carbohydrates, fat, protein and vitamins/minerals
- Reasons for maintaining water balance (hydration)

Link to Specification [Here](#)