

GCSE PE

All topic areas can be found on seneca learning and youtube Planet PE

Paper 1

Applied anatomy and physiology

- Bones, function of the skeleton and its structure
- Muscles of the body
- Structure of synovial joint
- Movement at joint, muscular contractions
- How they work antagonistically
- Pathway of air and gaseous exchange
- Blood vessels
- Structure of heart, cardiac cycle, output and stroke volume
- Mechanics of breathing
- Aerobic and anaerobic exercise
- Recovery / EPOC
- Short, medium and long term effects of exercise

Movement Analysis

- Levers and their classes
- Mechanical advantage
- Planes and axis

Physical Training

- Components of fitness and their tests - how to measure and collect data
- Reasons and limitations of testing
- Principles of training and their application to sports performers
- Types of training and the advantages / disadvantages for various sports
- Calculating intensity / training zones
- Injury prevention
- High altitude training and seasonal training
- Warm up and cool down

Paper 2

Health fitness and well being

- The meaning of health, fitness and well being - three strands mental physical and social
- Consequences of sedentary lifestyle
- Obesity and affects on performance
- Somatotypes
- Energy Use - roles of nutrients and reason for balanced diet - carbohydrates, fats, protein, vitamins and minerals
- Hydration

Sociocultural influences

- Engagement patterns and factors that affect them
- Commercialisation, sponsorship and media = golden triangle
- Positive and negative impact of sponsorship and media on spectators, performers, sport and officials
- Technology - what and how used - impact on sport, performer, officials, spectators
- Conduct of performers - etiquette, code of conduct, gamesmanship and sportsmanship.
- Performance Enhancing Drugs
- Advantages / disadvantages of PED use in sports
- Spectator behaviour, hooliganism and strategies to combat hooliganism.

Sports Psychology

- Skill and ability, classifications
- Definitions and types of goals
- Use of performance and outcome goals, including SMART targets
- Basic information Processing model
- Feedback and guidance
- Arousal and inverted U theory
- Application of how optimal arousal has to vary due to sport played and skill/stress management techniques
- Intrinsic and extrinsic motivation