

Anatomy & physiology

- Bones/types of bones/function of skeleton/muscles/joints/synovial joint/movement/antagonist
- Pathway of air/characteristics & function of alveoli/gaseous exchange/blood vessels/structure of blood vessels/structure of heart/cardiac cycle/pathway of blood/cardiac output/stroke volume
- Mechanics of breathing- intercostal muscles, ribs & diaphragm/spirometry trace/lung volumes
- Aerobic exercise/anaerobic exercise- practical examples of differing intensities
- EPOC/recovery from exercise/immediate effects of exercise/short term effects of exercise/long term effects of exercise

Movement analysis

- 1st, 2nd and 3rd class lever/sporting examples of each/mechanical advantage in relation to the 3 levers
- Movement- flexion/extension/abduction/adduction/rotation/circumduction/plantar flexion/dorsi flexion
- Planes/axes

Physical training

- health & fitness definitions/ components of fitness
- reasons for and limitations of fitness testing/ fitness testing for each component of fitness/data collection for fitness testing
- Principles of training/progressive overload/FITT/applying principles of training
- know the 7 types of training/advantages & disadvantages of these
- calculating training intensities & threshold
- preventing injuries/warm up/cool down
- specific training techniques- altitude training
- seasonal training- pre/competitive/post season