

Physics 18975
Demonstrate knowledge of science in sport

Sports Science
Level 1, 2 credits



Describe changes that occur due to exercise

- Short-term changes that occur when exercising.
 - pulse rates
 - breathing
 - sweat production
 - temperature
- Long-term outcomes of exercise
 - stamina
 - strength
 - skill
 - suppleness
 - speed
 - recovery rate
 - base pulse rate

Describe the structure of the skeleto-muscular system.

- Identify parts of the system:
 - spine
 - rib cage
 - pelvis
 - femur
 - humerus
 - biceps
 - pectorals
 - quadriceps
 - tendon

Identify a joint type needed to produce movement:

- hinge joint
- ball and socket joint

Describe forces and their effect in sport.

- identify the forces
 - friction
 - weight
- identify the effects of forces
 - balanced
 - unbalanced

Solve simple work problems in a sport context

- calculation of simple work examples
- calculation of simple energy examples

