

# BTEC National Diploma in Sport

## Y11-12 Transition work 'getting ready for sixth form'

### Task 1

#### Introduction

The human body is made up of many different systems that work together and allow us to take part in a huge variety of sport and exercise activities. The skeletal and muscular systems work together to allow our bodies to perform a vast range of different movements.

Our cardiovascular and respiratory systems act as a delivery service, working together to supply oxygen and nutrients to the body which in turn is used to produce energy for muscular contraction. In order to appreciate how each of these systems function, you will study the structure of the skeletal, muscular, cardiovascular and respiratory systems. The human anatomy of these systems is very different but in terms of operation, each system is implicitly linked. Having an understanding of these body systems is imperative in the sport and active leisure industries.

#### Scenario

University places are extremely hard to get onto these days. You have applied for a place on a sports coaching degree. You have been called for an interview for a place on the course. As part of the application you must demonstrate a knowledge & understanding of sport and the influences on performance. You have been given the topic of the skeletal system to research & must be prepared to present and discuss fully in a discussion with an interview panel at the university.

**Task 1** Using PowerPoint prepare slides for your discussion with your tutor:

- a) Find a blank picture of the AXIAL skeleton & label it
- b) Find a blank picture of the APPENDICULAR skeleton & label it

For each you will be required to describe: (a) where it is located, (b) the bones that form that part of the skeleton, (c) what that skeleton's function & role is & (d) What movement it allows DO NOT FORGET TO REFERENCE YOUR WORK & PICTURES

**Task 2** Using PowerPoint, prepare slides for your discussion with your tutor on the following:

Find a blank picture of the skeleton & then identify the following 21 bones on it to include; cranium, clavicle, ribs, sternum, humerus, radius, ulna, scapula, ilium, pubis, ischium, carpals, metacarpals, phalanges x2, femur, patella, tibia, fibula, tarsals, metatarsals

**Task 3** Using PowerPoint, prepare slides for your discussion with your tutor on the following:

Prepare a slide on each of the 5 FUNCTIONS OF THE SKELETAL SYSTEM which covers the following:

- (A) What it is
- (B) How the skeleton provides it
- (C) Why the function is important/useful

*When referencing, please use the Harvard style:*

<https://www.canterbury.ac.uk/students/docs/study-skills/resource-1-Harvard-Referencing-Guide.pdf>

Recommended websites;

www.brianmac.com Inner Body

<http://innerbody.com>