IB DP Sports Exercise and Health Science (IB1)



## **Summary**

## Topic 1.1 - Skeletal System

Start date Subject Year Duration

IB1, IB2 Sports, exercise and health Week 1, September 2 weeks 4 hours

science

Course Part

Topic 1 - Anatomy

#### Description

The musculoskeletal system is made up of the skeletal system which includes the bones and joints, and the muscular system which contains the muscles. When bones come together, they form joints. Muscles cross these joints and pull on the bones causing movement at the joints. Therefore, the musculoskeletal system plays a vital role in allowing you to do all the movements that are needed in daily life. To understand how bones and muscles are involved in sporting actions such as running, jumping up to spike a volleyball, kicking a football or throwing a javelin, it is important to know about the location and structure of specific muscles and bones, and to understand how they work together. This chapter will introduce these topics and will provide a basis for future chapters that also refer to the musculoskeletal system.



## Inquiry & Purpose

(?) Inquiry / Higher Order Questions

Type **Inquiry Questions** 

How does the anatomy of skeletal system allow the body to function effectively?



#### Curriculum



Develop an ability to analyse, evaluate and synthesize scientific information

Objectives

#### Demonstrate knowledge and understanding of

facts, concepts and terminology

communicating scientific information

#### **Apply**

facts, concepts and terminology

methods of communicating scientific information

## IB DP Sports Exercise and Health Science (IB1)

# Syllabus Content

# Core

#### Topic 1: Anatomy

- 1.1 The skeletal system
  - 1.1.1 Distinguish anatomically between the axial and appendicular skeleton.
  - 1.1.2 Distinguish between the axial and appendicular skeleton in terms of function.
  - 1.1.3 State the four types of bone.
  - 1.1.4 Draw and annotate the structure of a long bone.
  - 1.1.5 Apply anatomical terminology to the location of bones.
  - 1.1.6 Outline the functions of connective tissue.
  - 1.1.7 Define the term joint.
  - 1.1.8 Distinguish between the different types of joint in relation to movement permitted.
  - 1.1.9 Outline the features of a synovial joint.
  - 1.1.10 List the different types of synovial joint.



# ATL Skills

# Approaches to Learning



# Thinking

- In this unit, we will

give students time to think through their answers before asking them for a response reward a new personal understanding, solution or approach to an issue ask open questions set students a task which required higher-order thinking skills (such as analysis or evaluation) build on a specific prior task



#### Communication

- In this unit, we will

have students give an oral presentation without reading from their notes construct a task so that students practise their listening skills assess or give feedback on speaking or writing concisely encourage or require students to plan a response before they begin



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#### Self-management

- In this unit, we will

set deadlines for students to meet

require students to revise and improve on work previously submitted

ask students to set their own learning goals

ask students to break down a larger task into specific steps

ask students to look for personal relevance in the subject matter

practise or discuss strategies to increase concentration

give students feedback on their approach to a task

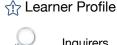
model positive skills and behaviours such as being well organized and punctual

help students to learn from failures or mistakes

create an atmosphere where students do not think they have to get everything right first time



## Developing IB Learners



Inquirers



Knowledgeable



**Thinkers** 



#### **Assessment**



# Peer and self assessment

Students will have ongoing self and peer assessment opportunities throughout the unit. This will mostly be made up of practise exam questions and smaller tasks.

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### Stream & Resources

#### Stream





#### **Mark West**

Posted 1 file on May 18, 2021 at 8:24 AM

### Topic 1.1 - Skeletal System

Skeletal System Powerpoint



Topic\_1.1-1.2\_-\_Skeletal\_and\_Muscular\_system\_PPT\_\_2\_\_\_1\_.pptx 20 MB PowerPoint Presentation





## **Mark West**

Posted 1 file on May 18, 2021 at 8:27 AM

#### Topic 1.1 - Skeletal System

Formative topic test for Topic 1.1 Skelatal System



Topic\_1.1\_Skeletal\_System\_-\_Topic\_test.docx

400 KB Word Document



#### **Mark West**

Posted 1 file on May 18, 2021 at 8:24 AM

#### Topic 1.1 - Skeletal System

Skeletal System Powerpoint



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