Access to Higher Education Unit

This unit forms part of an Access to HE Diploma. If delivering the graded version of this unit, please refer to the Provider Handbook for details on grading descriptors and the application of these across units within your programme.

Unit Title: The Musculoskeletal System

Graded Unit Reference Number: GA33BIO07

Ungraded Unit Reference Number: UA33BIO07

Module: Biology; Human Biology

Level: Three (3)

Credit Value: Three (3)

Minimum Guided Learning Hours: 30

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Know the main features of the human skeleton and appreciate the features of different types of joint	1.1 Identify the two major divisions and the main bones of the human skeleton
	1.2 Categorise joints in the human skeleton in terms of degrees of freedom of movement at the joint
	1.3 For a named synovial joint, identify the structures present (including muscles) and outline their functions
2. Understand the significance of the microstructure of bone and cartilage	2.1 Describe the main stages in the ossification of a long bone, including the roles of osteoblasts and osteoclasts
	2.2 Compare the microstructure of bone and cartilage and link differences in structure to differences in function
3. Understand the structure of skeletal muscle and the physiology of muscle contraction	3.1 Describe the main features of the structure of the cells in striated muscle
	3.2 Explain the roles of neurotransmitters, ions (sodium, potassium and calcium) and ATP in muscle contraction
	3.3 Interpret diagrams illustrating the sliding filament model of muscle contraction

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