

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: Organisation of the Body

Graded Unit Reference Number: GA33BIO13

Ungraded Unit Reference Number: UA33BIO13

Module: Biology; Human Biology

Level: Three (3)

Credit Value: Three (3)

Minimum Guided Learning Hours: 30

Units barred for selection against this unit:

- From Cells to Organ Systems (GA36BIO33 / UA36BIO33)

| Learning Outcome (The Learner will): | Assessment Criterion (The Learner can): |
|--|---|
| 1. Understand the levels of organisation in the human body | 1.1 Identify the levels of organisation in the human body and place them in order of size from cell to organism |
| | 1.2 Identify the organ systems of the body and explain the division of labour (tasks) between the different organ systems |
| | 1.3 For three human organ systems identify the organs making up each system and outline their main functions |
| 2. Understand the need for cell specialisation and relate this to the functions of different tissues | 2.1 Interpret data relating surface area, volume ratio and size and explain the need for cell specialisation in multicellular organisms |
| | 2.2 Explain the specialised features of the following human cells: ovum, sperm, motor neuron and epithelial cell from the ileum |
| | 2.3 Identify the four basic types of tissue in the body and describe their main features |
| | 2.4 Give two examples of each of the four tissue types outlining their specific functions and their location in the body |

| | |
|---|--|
| 3. Understand the features of stem cells and the principles of tissue engineering | 3.1 Describe the key features of stem cells compared to specialised cells |
| | 3.2 Outline the principles of tissue engineering including the sources and culture of stem cells and provision of an artificial scaffold |