## **Unit 5: The Study of Living Systems**

## **Outline Learning Plan**

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

## Topic and suggested assignments/activities

Introduction to unit

Theory work on cells and tissues, including the major organelles of eukaryotic cells

Practical activity looking at slides of eukaryotic cells to view the main organelles for **Assignment 1: Structure of Eukaryotic Cells (AC 1.1)** – observation and report with drawings

Formal teaching of the structure of the nervous and endocrine systems (in outline only)

Theory work on the role of both the nervous and endocrine systems in homeostasis

Assignment 2: The Role of the Nervous and Endocrine Systems in Homeostasis (AC 1.2 and 1.3) – labelled poster with flow diagrams

Formal teaching of ecosystems

Theory and practical work on ecosystems, including components of an ecosystem and how animals adapt to their environment for **Assignment 3: Components of an Ecosystem and Adaptations in Ecosystems (AC 2.1 and 2.2)** – report from field trip or question and answer session with individual students

Theory work on the effects of humans on ecosystems for Assignment 4: Effects of Humans on Ecosystems (AC 2.3) – presentation

Theory work on genes, including inheritance and variation

Research into an inherited disease

Assignment 5: Role of Genes in Inheritance and Variation (AC 3.1 and 3.2) – report or presentation