The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 12 A Level Biology
Learning Programme 5

The LORIC skill focus for his LP is: COMMUNICATION.
The Moral Virtues focus for this LP are: COURAGE and HUMILITY.

Courage - Acting with bravery and overcoming fears.
Humility - Having a modest view of oneself.

What will I be learning about in this Learning Programme?
Biodiversity of organisms and how sampling is used to measure biodiversity.

Where have I seen this learning before?
You have learnt about biodiversity in KS3 and GCSE

What could I use it for?
You will use this again if you study a Bachelor of Science degree in Biological Science or Ecology.

Literacy:
- Capital letters must be used at the start of sentences and for the first letter of proper nouns
- Full stops must be used at the end of a sentence
- Question marks must be used at the end of a question
- Apostrophes should only be used for possession or omission
- Days of the week and months must be spelled correctly
- Key words must be spelled correctly

In LP5.1, I will know: 11/05/26 - (WK 1)	Key Vocabulary	Homework
how biodiversity may be considered at different levels; how sampling is used in measuring the biodiversity of a habitat and the importance of sampling random and non-random sampling.	Habitat	Research different habitats
In LP5.2, I will know: 18/05/26 - (WK 2)	**Key Vocabulary**	**Homework**
the importance of sampling the range of organisms in a habitat; how to measure species richness and species evenness in a habitat.	Biodiversity	Exam question on methods of sampling
LP5 RLW, I will: 01/06/26 - (WK 1)		
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.	Revision	Revision task
In LP5.3, I will know: 08/05/26 - (WK 2)	**Key Vocabulary**	**Homework**
the use and interpretation of Simpson's Index of Diversity (d) to calculate the biodiversity of a habitat; how to carry out PAG3. Extended Task.	Sampling	Write up PAG 3
In LP5.4, I will know: 15/06/26 - (WK 1)	**Key Vocabulary**	**Homework**
how to complete a summative assessment; my strengths and areas for improvement.	Assessment	Review task
In LP5.5, I will know: 22/06/26 - (WK 2)	**Key Vocabulary**	**Homework**
how genetic biodiversity may be assessed, for example, by the calculation of the percentage of gene variants (alleles) in a genome; the factors affecting genetic biodiversity in isolated populations.	Alleles	Question on calculating genetic diversity
In LP5.6, I will know: 29/06/26 - (WK 1)	**Key Vocabulary**	**Homework**
the factors affecting biodiversity, including human population growth, agriculture and climate change; the ecological, economic and aesthetic reasons for maintaining biodiversity in situ and ex situ methods of maintaining biodiversity. Extended Task.	In situ ex situ	Discuss why we should maintain biodiversity.
In LP5.7, I will know: 06/7/26 - (WK 2)	**Key Vocabulary**	**Homework**
in situ and ex situ methods of maintaining biodiversity; international and local conservation agreements made to protect species and habitats.	Conservation	Exam question on in situ and ex situ conservation.

PRT Task 1

PRT Task 2

Resources to support learning:
EPC Knowledge organiser, Text book, Synergy, Studymind, Seneca OCR Biology alevel.

FFET Award Challenge for this Learning Programme:
Assist the science department in an after school club or work with the lab technician to gain experience of working in a lab. Complete a practice paper as part of your revision.