

Access to H.E. National Programme Unit



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| Unit Title: | Evolution and Speciation | | |
| Graded Unit Code: | GA33BIO04 | Ungraded Unit Code: | UA33BIO04 |
| Pathway(s): | Science and Engineering | | |
| Module(s): | Biology | | |
| Level: | 3 | Credit Value: | 3 |
| Valid from: | 31 st July 2021 | Valid to: | 31 st July 2026 |

The following QAA grade descriptors must be applied if you are delivering the graded version of this unit:

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| 1 | Understanding of the subject |
| 2 | Application of knowledge |
| 5 | Communication and presentation |
| 7 | Quality |

| LEARNING OUTCOMES | ASSESSMENT CRITERIA |
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| The learner will: | The learner can: |
| 1. Recognise and use systems of classification of life | 1.1 Explain the development of the two kingdom systems of classification (proposed by Linnaeus) into the modern systems. |
| | 1.2 Distinguish the main features of organisms belonging to different kingdoms (five or six kingdom classifications) |
| | 1.3 Explain the principles of hierarchy of taxonomic groups and use named examples to illustrate the use of taxa |
| 2. Understand evidence for the theory of evolution by natural selection | 2.1 Describe two different examples of evidence suggested by Charles Darwin in support of his theory of natural selection |

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| | <p>2.2 Research two different examples of artificial selection that support Darwin's theory</p> |
| | <p>2.3 Analyse data in support of Darwin's theory from comparative morphology, comparative biochemistry and comparison of genomes</p> |
| 3. Understand how natural selection may lead to speciation | <p>3.1 Compare the main features of Darwin's theory of speciation with those of Lamarck's</p> |
| | <p>3.2 Identify factors that can lead to genetic mutation and use specific examples to illustrate the possible consequences (advantageous, neutral, detrimental)</p> |
| | <p>3.3 Identify a range of selection pressures that may contribute to speciation</p> |
| | <p>3.4 Explain the importance of reproductive isolation in the formation of a new species</p> |