

BIOLOGY

BIO 301

This is an approved subject for University Entrance

This course caters both for those students requiring an academic background for entry to tertiary studies and those who intend going no further but who wish to learn more about the issues that will affect their lives. The aim is for students to develop practical and communication skills and an understanding of the basic biological issues now confronting humanity.

INTERNAL ASSESSMENT

Achievement/ Unit Standard	Number	Title	No of Credits
AS 3.1	90713	Carry out an investigation into an aspect of the ecological niche of an organism.	4
AS 3.2	90714	Research a contemporary biological issue.	3
AS 3.6	90718	Describe applications of biotechnological techniques to meet human needs and demands. This includes Polymerase Chain Reaction (PCR), ligation, use of restriction enzymes, gel electrophoresis, DNA sequencing, tissue culture, gene cloning, transgenesis, DNA profiling and genome analysis.	3
US	8931	Describe gene expression.	4
US	8932	Describe gene-gene and gene environment interaction	3

EXTERNAL ASSESSMENT

AS 3.4	90716	Describe animal behaviour and plant responses, which include orientation responses, timing responses, inter-specific and intra-specific relationships.	4
AS 3.5	90717	Describe patterns of evolution, which include speciation and the ways in which it occurs, isolating mechanisms, convergent and divergent evolution including adaptive radiation.	3
AS 3.7	90719	Describe trends in human biological and cultural evolution, including changes from early bipedal apes onwards, physical changes relating to bipedalism, the skull, the manipulative ability of the hand. Cultural developments include the use of tools, fire, food-gathering, abstract thought, dispersal of modern hominids and domestication of animals and plants.	3

Total number of credits offered	27
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Suggested pre-requisite : **BIO 201**

Course related costs : **Workbook \$25**
3 day AS 3.1 programme at Marine Studies Centre, Portobello \$58

Contact person : **Dr C Tyrrell**