

PRESCRIBED FOCUS AREAS

Prescribed Focus Areas (PFAs) in detail

PFA (general)	Preliminary Course PFA— <i>a student</i>	Details of this PFA
1 the history of biology	P1 outlines the historical development of major biological principles, concepts and ideas	<ul style="list-style-type: none"> ■ applies to the thinking and to the knowledge at that time in the past ■ should be addressed using terminology appropriate to the time ■ gives us an insight into the use of the Scientific Method in the past ■ allows us to gain an appreciation of the importance and the significance of the work done in the past ■ gives us an insight into how general thinking in society has changed over time
2 the nature and practice of biology	P2 applies the processes that are used to test and validate models, theories and laws of science, with particular emphasis on first-hand investigations in biology	<ul style="list-style-type: none"> ■ is tentative (i.e. information is not fixed but in a state of flux) ■ is empirical (based on the Scientific Method—research, experimentation and observation) ■ involves hypothesising, theories and models ■ may show bias (e.g. cultural, religious and/or gender specific) ■ shows how the constraints brought about by limitations in technology in the pursuit of further knowledge often lead to developments and advancements in that technology
3 applications and uses of biology	P3 assesses the impact of particular technological advances on understanding in biology	<ul style="list-style-type: none"> ■ can be very contemporary, involving the latest discoveries ■ may also have a strong historical emphasis ■ usually highlights the strong link between research and implementation, especially in fields such as health and genetics
4 implications of biology for society and the environment	P4 describes applications of biology which affect society or the environment	<ul style="list-style-type: none"> ■ has a strong overlap with the previous PFA ■ includes ethical considerations and contentious issues ■ requires a knowledge of biology sufficient to make predictions ■ also may require a good depth of general and background knowledge (i.e. wider reading)
5 current issues, research and developments in biology	P5 describes the scientific principles employed in particular areas of biological research	<ul style="list-style-type: none"> ■ is constantly changing, drawing on recent and current events in biology ■ requires reading of newspapers and popular science magazines (e.g. <i>New Scientist</i>) ■ also involves ethical and technical aspects of biological issues