Topic 6 PLC for Term 2				
6.1	Understand how to determine the time of death of a mammal by examining the extent of decomposition, stage of succession, forensic entomology, body temperature and degree of muscle contraction.	Red	Amber	Green
6.2	Know the role of micro-organisms in the decomposition of organic matter and the recycling of carbon.	Red	Amber	Green
6.3	Know how DNA profiling is used for identification and determining genetic relationships between organisms (plants and animals).	Red	Amber	Green
6.4	Know how DNA can be amplified using the polymerase chain reaction (PCR).	Red	Amber	Green
	CORE PRACTICAL 14: **Use gel electrophoresis to separate DNA fragments of different length.**	Red	Amber	Green
6.5	Be able to compare the structure of bacteria and viruses.	Red	Amber	Green
6.6	Understand how *Mycobacterium tuberculosis* (TB) and Human Immunodeficiency Virus (HIV) infect human cells, causing a sequence of symptoms that may result in death.	Red	Amber	Green
6.7	Understand the non-specific responses of the body to infection, including inflammation, lysozyme action, interferon, and phagocytosis.	Red	Amber	Green
6.8	Understand the roles of antigens and antibodies in the body's immune response including the involvement of plasma cells, macrophages and antigen-presenting cells.	Red	Amber	Green
6.9	Understand the differences between the roles of B cells (B memory and B effector cells) and T cells (T helper, T killer and T memory cells) in the body's immune response.	Red	Amber	Green
6.10	Understand how one gene can give rise to more than one protein through posttranscriptional changes to messenger RNA (mRNA).	Red	Amber	Green
6.11	i) Know the major routes pathogens may take when entering the body. ii) Understand the role of barriers in protecting the body from infection, including skin, stomach acid, and gut and skin flora.	Red	Amber	Green
6.12	Understand how individuals may develop immunity (natural, artificial, active, passive).	Red	Amber	Green
6.13	Understand how the theory of an 'evolutionary race' between pathogens and their hosts is supported by the evasion mechanisms shown by pathogens.	Red	Amber	Green
6.14	Understand the difference between bacteriostatic and bactericidal antibiotics.	Red	Amber	Green
	CORE PRACTICAL 15: Investigate the effect of different antibiotics on bacteria.	Red	Amber	Green
6.15	Know how an understanding of the contributory causes of hospital acquired infections have led to codes of practice regarding antibiotic prescription and hospital practice that relate to infection prevention and control.	Red	Amber	Green