CURRICULUM CONTENT

1. Genetic control

- Structure and replication of DNA
- Role of DNA in protein synthesis

2. Infectious disease

- Cholera, malaria, tuberculosis (TB) and HIV/AIDS
- Antibiotics

3. Immunity

- The immune system
- Vaccination

4. Ecology

- Levels of ecological organisation
- Energy flow through ecosystems
- Recycling of nitrogen

5. Energy and respiration

- The need for energy in living organisms
- Respiration as an energy transfer process
- Aerobic respiration
- Anaerobic respiration
- The use of respirometer

6. Photosynthesis

- Photosynthesis as an energy transfer process
- The investigation of limiting factors

7. Regulation and control

- The importance of homeostasis
- Excretion
- Control of water and metabolic wastes
- Nervous and hormonal communication
- Response to changes in the external environment
- Regulation of the internal environment
- Communication and control in flowering plants
- Plant growth regulators