**HSC Biology 2023-2024**

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| **Component** | **Task 1**  | **Task 2**  | **Task 3**  | **Task 4**  |
| **Nature of tasks**  | **First Hand Investigation** | **Depth Study**   | **Research Task** | **Trial Examination**  |
| **Timing**  | Term 4 Week 8  | Term 1Week 9  | Term 2 Week 7  | Term 3 Weeks 4-5 |
| **Outcomes assessed**  | BIO11/12-4 BIO11/12-5BIO11/12-6 BIO11/12-7 BIO12-12  | BIO11/12-1 BIO11/12-3 BIO11/12-6 BIO11/12-7 BIO12-13   | BIO11/12-1BIO11/12-2BIO11/12-3BIO12-8BIO12-9BIO12-10 BIO12-14  | BIO11/12-4BIO11/12-5 BIO11/12-6 BIO11/12-7 BIO12-8 BIO12-9BIO12-10BIO12-11 |
| **Weighting %**  | **15%**  | **30%**  | **20%**  | **35%**  | **100%**  |
| Skills in Working Scientifically  | 10%  | 20%  | 10%  | 20%  | **60%**  |
| Knowledge and Understanding  | 5%  | 10%  | 10%  | 15%  | **40%**  |

**Knowledge and Understanding**

BIO12-12 explains the structures of DNA and analyses the mechanisms of inheritance and how processes of reproduction ensure continuity of species BIO12-12

BIO12-13 explains natural genetic change and the use of genetic technologies to induce genetic change

BIO12-14 analyses infectious disease in terms of cause, transmission, management and the organism’s response, including the human immune system

BIO12-15 explains non-infectious disease and disorders and a range of technologies and methods used to assist, control, prevent and treat non-infectious disease

**Skills in Working Scientifically**

BIO11/12-1 develops and evaluates questions and hypotheses for scientific investigation

BIO11/12-2 designs and evaluates investigations in order to obtain primary and secondary data and information

BIO11/12-3 conducts investigations to collect valid and reliable primary and secondary data and information

BIO11/12-4 selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media

BIO11/12-5 analyses and evaluates primary and secondary data and information

BIO11/12-6 solves scientific problems using primary and secondary data, critical thinking skills and scientific processes

BIO11/12-7 communicates scientific understanding using suitable language and terminology for a specific audience or purpose

\* BIO 11/12-1 Questioning & Predicting & CH 11/12-7 Communicating must be assessed in the depth study along with two other Working Scientifically outcomes and at least one Knowledge & Understanding outcome.

Underline text: indicates Knowledge & Understanding outcomes