**LIFE SCIENCES - GRADE 12 2022**

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| **TOPIC** | **ASSESSMENT STANDARDS** | **PORTFOLIO ASSESSMENT TASKS** |
| **PHASE 1 (15 November 2021 – 11 March 2022)** | | |
| **Responding to the environment - Humans** | Parts of the nervous system and reflexes | **Task 1:** Practical 1 – Nervous system  25 – 28 Jan  **Task 2:** Assignment – Nervous system  22 – 26 Feb  **Task 3:** March Controlled Test |
| The eye |
| The ear |
| **DNA: The code of life** | Nucleic acids: Location, discovery and structure of DNA and RNA |
| DNA replication, DNA profiling and protein synthesis |
| **Meiosis** | Review mitosis and introduce meiosis |
| The process of meiosis |
| **Reproduction** | Diversity of reproductive strategies |
| Human reproduction |
| **PHASE 2 (14 March 2022 – 10 June 2022)** | | |
| **Reproduction** | Human reproduction | **Task 4:** Practical 2 – Meiosis  20-24 March  **Task 5: June exam** |
| **Genetics and inheritance** | History of genetics |
| Monohybrid and dihybrid crosses |
| Mutations, sex-linked disorders |
| **Human endocrine system** | Location of endocrine glands |
| Role of these glands in the body |
| **Homeostasis** | Homeostasis |
| **Responding to the environment - plants** | Plant hormones |
| **PHASE 3 (13 June 2022 – 21 October 2022)** | | |
| **Evolution by natural selection** | Origin of ideas about evolution | **Task 6:** Trials Exam |
| Evolution by natural selection – Darwinism |
| Speciation |
| Mechanisms for reproductive isolation |
| Evolution in present times |
| **Human Evolution** | Evidence for human evolution |
| Out of Africa hypothesis |
| Importance of the Cradle of Humankind |