**Medical Science KS5 Overview** ***2021-2022***

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|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| Year 12 | **Unit 1 – Human Health and Disease:**  - Biological principles  - Function of main classes of biological molecules in humans  - Structure of human cells  **Unit 2 – Physiological Measurement techniques:**  - Function of physiological measurement tests  - Significance of data obtained from physiological measurements  - Limitations of physiological measurement testing | **Unit 1 – Human Health and Disease:**  - Transport systems in cells  - How cells process information  - Structure of human physiological systems  - Function of human physiological systems  **Unit 2 – Physiological Measurement techniques:**  - Patient confidentiality  - Conduct towards patients  - Plan and perform physiological measurement tests  - Evaluate information from physiological measurement tests | **Unit 1 – Human Health and Disease:**  - External factors impact on the  - How lifestyle may affect major body systems  - How lifestyle may impact health  **Unit 3 – Medical Science Research Methods:**  - Research methods  - Research hypothesis  - Sampling methods  - Variables  - Ethical issues | **Unit 1 – Human Health and Disease:**  - How pathogens can affect body systems  - How non-infectious diseases affect body systems  **Unit 3 – Medical Science Research Methods:**  - Plan, collect and document data  - Analyse data using statistical methods,  - Significance of errors, demand characteristics, reliability, validity, bias, confidence levels, correlation and dispersion. | **Unit 1 exam:**  - Unit 1 Revision  - Study of unit 1 pre-release | **Unit 4 – Medicines and treatment of disease:**  - Factors to be considering when prescribing medicines  - Strategies to improve adherence of patients taking prescriptions  - Rotes for administering medicines  **Unit 5 – Clinical Laboratory Techniques:**  - Principles of clinical tests |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| Year 13 | **Unit 4 – Medicines and treatment of disease:**  - Molecular basis of the action of medicines  - Factors that affect the distribution of medicines in the body  - Fate of medicines in the body  **Unit 5 – Clinical Laboratory Techniques:**  - Principles of clinical tests;  - Biochemical tests  - Enzyme assays  - Chromatography  - Radioactive - immunoassays  - ELISA,  - Spectrophotometry, | **Unit 4 – Medicines and treatment of disease:**  - How medicines affect body systems  - How medicines affect causative agents of infectious disease  - Adverse reactions to medicines  **Unit 5 – Clinical Laboratory Techniques:**  - Principles of clinical tests;  - Nephelopmetry  - Turbidimetry  - Haematology  - Histopathology  - Microbiological  - Genetic | **Unit 1 resit**  **Unit 4 – Medicines and treatment of disease:**  - Principles of treatment of cancer  - Genetic basis of cancer  - Impact of new treatments for cancer  **Unit 5 – Clinical Laboratory Techniques:**  - Factors that affect clinical test results  - Carry out clinical laboratory techniques | **Unit 5 – Clinical Laboratory Techniques:**  - Assess biological samples using clinical tests  - Record and process data from clinical tests  **Unit 6 – Medical Case Study:**  - How physiological information is presented within case studies  - How physiological measurement techniques can be used to support diagnosis and treatment | **Unit 1 resit exam**  **Unit 6 exam**  - Unit 6 Revision  - Study of unit 6 pre-release | **Course end** |