**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** |