

Long Term Plan: Applied Human Biology Year 13 (Teacher One)

“Science is simply the word we use to describe a method of organising our curiosity.”

Half term	Unit title	Key knowledge/ Content to learn and retain	Essential skills to acquire (subject & generic)	Anticipated misconceptions	Links to previous KS	Opportunity for stretch for high prior attainers
One	Public Health (This is a continuation of the topic from the end of Y12)	<p>The use of public health messages, vaccinations and antibiotics to reduce the spread of disease</p> <p>The impact of lifestyle on health</p> <p>STIs</p> <p>Genetic disorders and genetic screening</p> <p>Drug development</p>	<p>Extended writing - including writing full lab reports with references and citations</p> <p>Drawing and labelling scientific diagrams</p> <p>Interpreting data presented in tabular and graphical format</p>	<p>Confusion between the different stages of drug development</p> <p>The difference between a risk factor and a cause</p>	The content of this unit will be new to students, although background knowledge of disease transmission from year 12 will be helpful.	Comparison of public health interventions and use of real data
SMSC & British Values	<p>Safe working in a lab and respecting each other's working space.</p> <p>Ethical issues surrounding the use of biological samples, including the use of live samples.</p>					
Cultural Capital	The ubiquity of biology allows for examples to be taught in a wide variety of familiar and unfamiliar contexts					
Career Link	<p>A BTEC in Applied Human Biology opens doors to a wide range of STEM field careers.</p> <p>The topics covered in this unit would build the foundations for students to study a range of biomedical and healthcare courses or to enter these fields through employment</p>					

Two	Health Organisations	<p>The role, responsibilities, structure and impact of: The NHS The WHO The GMC The NMC Public Health Agency</p> <p>The impact of the following on public health: Pharmaceutical companies Health and Medical Charities The individual (patient & family)</p>	<p>Extended writing - including writing full lab reports with references and citations</p> <p>Drawing and labelling scientific diagrams</p> <p>Interpreting data presented in tabular and graphical format</p>	<p>Confusion between the various organisations, many of them have some overlap so will need careful teaching to tell them apart.</p>	<p>The content of this unit will be new to students, although background knowledge of disease transmission from year 12 will be helpful.</p>	<p>Comparison of similar organisation and evaluation of their impact</p>
SMSC & British Values	<p>Safe working in a lab and respecting each other’s working space.</p> <p>Ethical issues surrounding the use of biological samples, including the use of live samples.</p>					
Cultural Capital	<p>The ubiquity of biology allows for examples to be taught in a wide variety of familiar and unfamiliar contexts</p>					
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Three	Criticising Data	<p>Primary vs Secondary Data</p> <p>The use of different data analysis techniques</p> <p>Judging validity of data</p> <p>The impact of funding on research outcomes</p> <p>Criticising conclusions and checking they are supported by the data</p>	<p>Extended writing - including writing full lab reports with references and citations</p> <p>Drawing and labelling scientific diagrams</p> <p>Interpreting data presented in tabular and graphical format</p>	<p>The difference between accuracy. Precision and validity.</p> <p>Just because data is valid, this does not mean that the conclusion of a report is correct.</p>	<p>This unit builds on and applies 7 years of “How Science Works” Skills - students will be very familiar with the terms used in this unit, and will be pushed to apply these to real scientific reports.</p>	<p>This unit can be easily scaffolded up or down based on the complexity of the articles and reports chosen</p>
SMSC & British Values	<p>Safe working in a lab and respecting each other’s working space.</p> <p>Ethical issues surrounding the use of biological samples, including the use of live samples.</p>					

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Four	Criticising Reports	Different mediums by which medical research is communicated Writing style and language The impact of Bias	Extended writing - including writing full lab reports with references and citations Drawing and labelling scientific diagrams Interpreting data presented in tabular and graphical format	Just because data is valid, this does not mean that the conclusion of a report is correct. Just because a report is affected by bias, does not mean that the conclusions of the report are incorrect.	This unit builds on and applies 7 years of “How Science Works” Skills - students will be very familiar with the terms used in this unit, and will be pushed to apply these to real scientific reports.	This unit can be easily scaffolded up or down based on the complexity of the articles and reports chosen
SMSC & British Values	Safe working in a lab and respecting each other’s working space. Ethical issues surrounding the use of biological samples, including the use of live samples.					
Cultural Capital	The ubiquity of biology allows for examples to be taught in a wide variety of familiar and unfamiliar contexts					
Career Link	A BTEC in Applied Human Biology opens to doors to a wide range of STEM field careers. The topics covered in this unit would build the foundations for students to study a range of biomedical and healthcare courses or to enter these fields through employment					
Five	Revision and preparation for Unit Three Exam Revisit to subject knowledge from across the course & use of PLC to ensure that students have a good grasp of all aspects of the specification Use of retrieval quizzes and activities to identify gaps in SK and misconceptions Support students in developing summary notes, flash cards etc to aid retrieval of key facts Ensure that students have the necessary skills for effective revision Review the wider reading that students have been doing to support their preparation for the essay questions of unit 3 Focus on past exam questions and papers – command words and application of knowledge Practice the application of knowledge that draws upon the practical aspects of the course Specific focus on the format and structure of the 5 essay questions that are on unit 3 Timed completion of questions to support with pace through the exam paper					

	Timed analysis of a range of journal articles to support with accuracy of information and pace through the exam paper.
Six	<p>Revision and preparation for Unit Three Exam</p> <p>Revisit to subject knowledge from across the course & use of PLC to ensure that students have a good grasp of all aspects of the specification</p> <p>Use of retrieval quizzes and activities to identify gaps in SK and misconceptions</p> <p>Support students in developing summary notes, flash cards etc to aid retrieval of key facts</p> <p>Ensure that students have the necessary skills for effective revision</p> <p>Review the wider reading that students have been doing to support their preparation for the essay questions of unit 3</p> <p>Focus on past exam questions and papers – command words and application of knowledge</p> <p>Practice the application of knowledge that draws upon the practical aspects of the course</p> <p>Specific focus on the format and structure of the 5 essay questions that are on unit 3</p> <p>Timed completion of questions to support with pace through the exam paper</p> <p>Timed analysis of a range of journal articles to support with accuracy of information and pace through the exam paper.</p>