

## Course Outline: Geography Post 16 Physical Geography Year 13

**Rationale**— In Year 13 we **begin with completing their NEA** to ensure this is fully complete and out the way before PPE exams. We then teach the two topics that are compulsory Water and Carbon / Energy. **We begin with water** as this is easier for the students to understand as they have more experience of the water cycle and the concept of water moving around a system in different forms. This then leads into the **same concepts with carbon**, by applying the cycling ideas learnt from the water topic this helps them to understand the Carbon and energy cycle. During the year we aim for students to grow as independent thinkers and informed and engaged citizens, who understand the role and importance of geography to the world's changing peoples, places and environments.

	Topic	KEY/FUNDAMENTAL CONCEPTS	You will be assessed on: SPWs
Autumn Term	NEA	<ul style="list-style-type: none"> <li>Draft hand in and improvements</li> </ul>	<ul style="list-style-type: none"> <li>NEA provisional feedback</li> <li>Verbal feedback/discussion</li> </ul>
	Tectonics	<ul style="list-style-type: none"> <li>The global distribution of tectonics, plate boundaries and tectonic processes.</li> <li>Theories to explain plate movements.</li> <li>Physical processes explain the causes of tectonic hazards.</li> <li>The relationship between hazards, vulnerability, resilience and disaster.</li> </ul>	<ul style="list-style-type: none"> <li>Tectonics data response, short answer, and 12 marker</li> <li>Teacher marked</li> </ul>
	Tectonics	<ul style="list-style-type: none"> <li>Tectonic hazard profiles of contrasting hazard impacts, showing vulnerability and resilience.</li> <li>Development and management are important in understanding disaster impact, vulnerability and resilience.</li> <li>Trends and patterns for tectonic disasters and how this affects impacts.</li> <li>Theories to understand the prediction, impact and management of tectonic hazards.</li> <li>Management of impacts by a variety of mitigation and adaptation strategies.</li> </ul>	<ul style="list-style-type: none"> <li>NEA write up and final submission <b>70 marks</b></li> <li>Y13 mock exam <b>Coasts, Tectonics, Water</b></li> </ul>
<b>Tectonics completed before mock exams. Synoptic paper to be set over Christmas</b>			
Spring Term	Carbon and Energy	<ul style="list-style-type: none"> <li>Most global carbon is locked in land stores as part of the long-term geological cycle.</li> <li>Biological processes store carbon on land and in the oceans on shorter timescales.</li> <li>The carbon cycle and links to other earth systems</li> <li>How the Carbon cycle is impacted by humans</li> <li>Energy security for countries, and reliance on fossil fuels.</li> <li>Reliance on fossil fuels for economic development is still the global norm.</li> </ul>	<ul style="list-style-type: none"> <li>Carbon short questions (3,6,8)</li> <li>Teacher marked</li> </ul>
	Carbon and Energy	<ul style="list-style-type: none"> <li>Costs and benefits to alternatives to fossil fuels</li> <li>Carbon cycles and the water cycle and threats by human activity.</li> <li>Impacts to human wellbeing from damage to the water and carbon cycles.</li> <li>Planetary warming risks large-scale release of stored carbon.</li> <li>Responses to carbon release from different players at different scales.</li> </ul>	<ul style="list-style-type: none"> <li>Carbon 12 marker carbon, 20 marker carbon and water combined</li> </ul>
	Revision	<p><b>Paper 3 Preparation</b> –Synoptic paper - focused on an issue which links to units in both the human and physical sides of the A-Level course. Studied at the end of the course, when students have the best knowledge, skills and application.</p> <p><b>Revision and Exam Preparation</b> – As well as support and providing revision materials in lessons, teachers will run after school revision sessions for all units studied</p>	<ul style="list-style-type: none"> <li>Synoptic paper</li> <li>External exams</li> </ul>
Summer Term			

Data handling built in throughout Year 12 and 13

**Qualitative data**

- a) use and understand a mixture of methods, including using interviews
- b) interpret and evaluate a range of source material including text and pictures, such as oral accounts, newspapers, creative media, social media, aerial, oblique, ground photographs, sketches and drawings
- c) understand the opportunities and limitations of qualitative techniques such as sampling, and how they create particular geographical representations
- d) understand the ethical and socio-political implications of collecting, studying and representing geographical data about human communities.

**2. Quantitative data**

- a) understand what makes data geographical and the geospatial technologies (e.g. GIS) that are used to collect, analyse and present geographical data
- b) demonstrate an ability to collect and to use digital, geo-located data, and to understand a range of approaches to the use and analysis of such data
- c) use, interpret and analyse geographical information including **dot maps, kite diagrams, linear and logarithmic scales, dispersion diagrams, satellite images, GIS** understand the purposes and difference between the following and be able to use them in appropriate contexts:
  - i. descriptive statistics of central tendency and dispersion, including **Gini Co-efficient and Lorenz curve**
  - ii. descriptive measures of difference and association from the following **statistical tests: t-tests, Spearman's rank, chi-squared; including measures of correlation and lines of best fit on a scatter plot**
  - iii. measurement, measurement errors, and sampling.