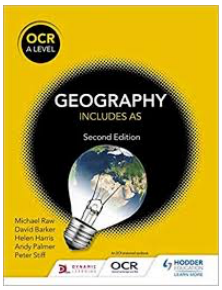
Geography transition project



At A-Level we follow the **OCR Specification** and will study the following topics:

Disease Dilemmas	Hazardous Earth
Changing Spaces; Making Places	Coastal Landscapes
Global Migration	Carbon & Water Cycles (ELSS)
Human Rights	Geographical Skills

https://www.ocr.org.uk/qualifications/as-and-a-level/geography-h081-h481-from-2016/

The A level course has a balance between physical, human and synoptic geography (where both sides of the subject are combined) so to help prepare you for the step up and keep you engaged with geography over the summer, choose one or more of the investigations outlined below.

The number of globes indicates the level of difficulty of each task. These mirror the progression which you will experience over the course.

 Small step-up from GCSE – builds on knowledge & skills you already have

 Larger step-up from GCSE – builds new knowledge & skills

 Complex ideas & concepts

We'd like you to bring your investigation(s) to enrolment in August, but if you'd like to get in touch about the project, get some feedback or find out more about the course, please email Liz Bentley-Pattison at lbe@woking.ac.uk

Happy investigating!

Human Geography: Migration

Write a 500 word report about one (or both) of the contemporary patterns in migration described below.

Either

1. Watch the video launching the World Migration Report 2020 and choose a region which interests you and investigate reasons for the patterns of migration described.
   World Migration Report

   Remember that the drivers of migration can be social, economic, environmental and political (SEEP) and while there are often clear 'push' and 'pull' factors, patterns of migration are usually very complex over space and time. Lee's model of migration helps us understand some of the intervening opportunities and obstacles migrants experience.

Or

2. How and why is the pattern of female migration changing in the 21st century?
   i. World Bank blog
   ii. UN Development wallchart

Physical Geography: Water and Carbon Cycles

Summarise your answers to the tasks below in a case study poster.

The Arctic Tundra is the coldest biome in the world. Tundra ecosystems are treeless regions found in the Arctic and on the tops of mountains where the climate is cold and windy and rainfall is rare. Tundra lands are covered with snow for much of the year but summer brings bursts of wildflowers. It's characterised by:

- limited biodiversity
- short growing season
- limited water drainage
- permafrost layer

As climate change becomes more of a threat, the vulnerable ecosystem becomes more important. Changes to water and carbon flows and stores are dramatically changing with unknown consequences.

Watch this short National Geographic introduction to the tundra before doing the tasks below:

Tasks

1. Investigate the ***water cycle*** of the Arctic tundra (rates of flows and distinct stores).
   You should research precipitation, humidity, transpiration, evaporation, groundwater, soil moisture and surface stores in summer. You should then go on to research permafrost, how it changes over the year and the effect this has on drainage and soil permeability.

2. Investigate the ***carbon cycle*** of the Arctic tundra (rates of flows and distinct stores).
   You should research how permafrost acts as a carbon sink, how long it is stored for, how it flows, what carbon fluxes are and arguments for the tundra now being a carbon source rather than a carbon sink.

3. Investigate **oil and gas exploration** in the Alaskan Arctic (in the Arctic National Wildlife Refuge, the ANWR):
   - What are the advantages and disadvantages of these activities? Can you categorise them by SEEP (social, economic, environmental, political)?
   - Who are the stakeholders involved and what are their interests?
   - How has the Trump presidency affected the rate and extent of drilling in the ANWR?

4. What are the **impacts** of oil and gas exploration on water and carbon cycles in the Arctic tundra? Watch these films to help you answer the question.
   i. Wake Up Freak Out
   ii. Permafrost – what is it?

Synoptic Geography

Write a discursive essay (arguments for and against) answering one of the questions below.

Either

1. 'Earthquakes are more dangerous than volcanoes.' To what extent do you agree with this statement?

BBC Bitesize
S-cool natural hazards

Seismic events:	Volcanic events:
Bam, Iran vs San Simeon, California 2003	Mount Kilauea 2018, Mount Etna 2018, White Island 2019
Haiti 2010 and Nepal 2015	Mount Merapi 2010, Mount Agung 2017-19
Japan 2011 and Christchurch, NZ 2011	Mount Taal, Philippines 2020

Or

2. 'The decision to live in tectonically active locations is determined by economic factors.' How far do you agree with this statement?

Consider your response to this statement by clicking on the links below:

i. Living with the volcano
ii. Why do so many people live near active volcanoes? National Geographic
iii. Why do people still live next to volcanoes? The Conversation
iv. Why people live in earthquake zones

Bonus activity

Watch both episodes of Expedition Volcano on BBC iPlayer. This is exactly what we mean by synoptic geography: the link between physical and human geography.

Our Year 13s did this activity just before Easter and then sent questions to the two main scientists in the project, Professor Chris Jackson and Dr Kayla Iacovino. They recorded their responses here and here. Enjoy!