

Some resources to get you thinking about Physical Geography in year 1

The first topic that we will be dealing with in the Physical Geography lecture series is climate and climate change. Topics that we will be addressing are; What controls the Earth's climate? Why do different regions of the world have different climates? Why do climates change? What are the potential impacts for society of future warming?

To get you thinking about climate change the Royal Society has some excellent resources, which you can find on this webpage:

<https://royalsociety.org/topics-policy/projects/climate-change-evidence-causes/>

On that webpage there are links to two articles that you can download and read. The first is a nice basic introduction to the science of global warming:

<https://royalsociety.org/-/media/policy/projects/climate-evidence-causes/climate-change-q-and-a.pdf>

The other article presents answers to 20 commonly asked questions about climate change and deals with some of the ideas that we will be discussing in more detail:

https://royalsociety.org/-/media/Royal_Society_Content/policy/projects/climate-evidence-causes/climate-change-evidence-causes.pdf

A very good primer to watch on ideas about global warming is the documentary from 2018 presented by David Attenborough. This was available on youtube but it is now available through the bbc iplayer:

<https://www.bbc.co.uk/iplayer/episode/m00049b1/climate-change-the-facts>

One of the most iconic images of global warming is the Hockey stick curve, an attempt to reconstruct temperatures going back 1000 years. The research, a collaboration by a large number of scientists but led by Prof Michael Mann, is widely accepted by scientists but has been widely debated and discussed. Here is brief video from youtube of Prof Mann explaining the Hockey stick curve and why it is significant:

https://www.youtube.com/watch?v=Ya1OZ_WJzPA

We will also be thinking about how climates change naturally and will be referring to the work of Prof William Ruddiman who has suggested that early human activity (the onset of farming for example not just the burning of fossil fuels) caused climate change. This video by Prof Ruddiman shows him discussing why climates change naturally over long-term, creating the ice ages:

<https://www.youtube.com/watch?v=96loo1w3SLY&t=337s>

Hopefully these resources should get you thinking about climate change and some of the topics we will be discussing in the first few months of your degree. The sort of questions that I will be discussing (and it would be worth bearing in mind as you watch and read these resources) are:

- 1) Why do climates change naturally?
- 2) Why are scientists so convinced that climates are changing now and that this change is caused by humans?
- 3) What are the main implications for society of these climate changes?

If you have any questions about these topics please email me – ian.candy@rhul.ac.uk

See you in September!