Introduction to Environmental Sciences



We're delighted you're thinking about studying at Brunel University London.

Our lecturers have put together the following information to help you prepare for your course. This will give you a snapshot of the materials and reading list you'll be using. You'll get a full breakdown of information before you enrol.

On our website you can also find out more about your modules and chat to a current student.

If you have any more questions, please get in touch.

We look forward to welcoming you to Brunel.

Sample lecture/coursework questions

- 1. Is microplastic pollution really a problem for ecosystems and human health?
- 2. How can we detect chemical pollution in our rivers and remove it safely?
- Describe how volcanoes are formed and explain how different types of volcanic eruptions have shaped our world.
- 4. Explain how evolution by natural selection influences ecosystems.
- 5. How does soil chemistry affect the aggregation of pollution?
- 6. What is a hypothesis and how can we design effective experiments to test them in environmental science?
- 7. If you travelled from the North Pole to the equator, what different biomes would you encounter and how would you know when you had transitioned from one to another?



Reading list

- Cresser, M. et al. (2012). Introduction to Environmental Science: Earth and Man. Pearson. ISBN-10: 9780131789326
- <u>Scientific opinion paper: Steffen, W. et al. (2015). Planetary boundaries: Guiding human development on a changing planet. Science 347, Issue 6223, 1259855. DOI: 10.1126/science.1259855.</u>
- Scientific opinion paper by Brunel expert: Kortenkamp, A. and Faust, M. (2018). Regulate to reduce chemical mixture risk. Science 361: Vol. 361, Issue 6399, pp. 224-226. DOI: 10.1126/science.aat9219.
- TED Talk

Indicative content

Study Themes	Reading
Earth System Science	Chapters 1, 2, 4 & 5
Biosphere & Ecology	Chapters 6, 15 & 25
Environmental Chemistry	Chapters 11, 19, 20 & 23
Climate Change	Chapters 3, 4 & 8
Ecosystem Stressors	Chapters 9, 15 & 25
Research Skills and Methods	Chapter 10, 22 & 24

