

COURSE CODE: \$279_1

Statement of participation

Sandy Herho

has completed the free course including any mandatory tests for:

Plate Tectonics

This 15-hour free course, for beginners as well as those with some scientific knowledge, provided an introduction to the study of plate tectonics.

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Plate Tectonics

https://www.open.edu/openlearn/science-maths-technology/science/geology/plate-tectonics/content-section-0

Section 5

Plate driving forces

Course summary

Plate tectonics is an earth sciences topic that attracts a good deal of interest, given that it a topic very often featured in popular science programmes on TV and radio. It is a subject that has strong visual appeal. In this 15-hour free course the coverage is self-contained, up to date and is written in a way that will be accessible to those with interest and motivation, all the more so for those who have some preexisting scientific understanding.

Learning outcomes

By completing this course, the learner should be able to:

- demonstrate a knowledge and understanding of the theory of tectonic plates and the different forms of evidence (e.g. palaeontology, palaeomagnetism, continuity of structures etc.) that can be used to understand the movement of the lithospheric plates over geological time
- demonstrate a knowledge and understanding of the mechanisms of crustal growth and transfer of heat at spreading ocean ridges
- demonstrate a knowledge and understanding of the three main types of plate boundary (constructive, destructive and conservative) and how they interact at triple junctions
- demonstrate a knowledge and understanding of the difference between relative and true plate motion
- demonstrate a knowledge and understanding of the driving and retarding forces that influence plate motion at constructive, destructive and conservative plate boundaries.

Completed study The learner has completed the following: Section 1 Preamble: the moving Earth Section 2 From continental drift to plate tectonics Section 3 The theory of plate tectonics Section 4 Plate tectonic motion