Future Learn

Issued 11th December 2019. futurelearn.com/certificates/p5ky2o0

## Certificate of Achievement

# TESLIM LAWAL

has completed the following course:

**ENVIRONMENTAL CHALLENGES: HUMAN IMPACT IN THE NATURAL ENVIRONMENT**
UNIVERSITY OF LEEDS

This online course explored human impact in the natural environment, examining the role of human actions and decisions in the complex systems of nature. It included an introduction to correlation and investigated the limitations of statistical testing.

2 weeks, 5 hours per week

**Professor Jon Lovett**
University of Leeds

UNIVERSITY OF LEEDS

In association with

CPD CERTIFIED
The CPD Certification Service

The person named on this certificate has completed the activities in the attached transcript. For more information about Certificates of Achievement and the effort required to become eligible, visit futurelearn.com/proof-of-learning/certificate-of-achievement.

This learner has not verified their identity. The certificate and transcript do not imply the award of credit or the conferment of a qualification from University of Leeds.

TRANSCRIPT

UNIVERSITY OF LEEDS

In association with

CPD CERTIFIED
The CPD Certification Service

# TESLIM LAWAL

has completed the following course:

## ENVIRONMENTAL CHALLENGES: HUMAN IMPACT IN THE NATURAL ENVIRONMENT

UNIVERSITY OF LEEDS

86%
AVERAGE TEST SCORE

This online course explored human impact in the natural environment, examining the role of human actions and decisions in the complex systems of nature. It included an introduction to correlation and investigated the limitations of statistical testing.

### STUDY REQUIREMENT

2 weeks, 5 hours per week

### LEARNING OUTCOMES

- Explore the question of causality as it applies to vegetation and climate.
- Discuss density-dependent population dynamics, where many individual interactions can lead to apparently chaotic fluctuations.
- Explain mathematical rules in nature and human social systems.
- Develop mathematical understanding of correlation and the limitations of statistical testing.

### SYLLABUS

- Understand the concept of causal relationships and how climate can determine vegetation type.
- Appreciate the difference between the climax concept of vegetation succession and the individualistic concept.
- Recognise that biodiversity is not distributed evenly over the Earth, but is clustered into centres of diversity.
- Understand that many individual interactions can lead to apparently chaotic fluctuations.
- Gain an awareness of the 1/f power function and how it can be used to transform apparently random fluctuations into a straight line.
- Introduction to the classic Nicholson's blow fly experiment that demonstrates density-dependent population dynamics.
- Understand that climate-driven events in human history, such as those of the Greenland Vikings and Mexican Mayans, were significantly influenced by social factors.
- Recognise that there are established physical relationships in nature such as allometric scaling.
- Gain an awareness of relationships between wealth and human social structures including the Pareto wealth distribution and environmental Kuznets curve, and the problems associated with their validity.
- Understand the difference between ecocentric and anthropocentric positions.
- Appreciate the arguments for legal rights for non-human species.
- Gain an awareness of the practical aspects of converting natural complexity into decision making in natural resource management.

### ACCREDITATION

This course has been certified by the CPD Certification Service as conforming to continuing professional development principles. By completing the course the learner has achieved 10 hours of CPD time.



Future Learn