Geography Outreach Sessions





Awards

We're proud of our awards including winning the first Global Teaching Excellence Award.



Global Teaching Excellence Award

We won the first Global Teaching Excellence Award. It recognised the University's commitment to world-class teaching and its success in developing students as independent learners and critical thinkers (Higher Education Academy, 2017).



University of the Year

The Times Higher Education named us as University of the Year in November 2013. The award recognises a university that has demonstrated exceptional performance. They liked our "bold, imaginative and innovative initiatives."



The Queen's Anniversary Prize

In 2019 we won a Queen's Anniversary Prize. It's one of the most coveted honours in UK Higher Education and was earned in recognition of the innovative and ground-breaking work in advanced measurement in smart manufacturing made by our Centre for Precision Technologies. This follows our 2019 Prize for innovations made by our Institute of Railway Research, and our 2015 Prize for expanding the global boundaries of new music.



A Five Star University

QS Stars has given us Five Stars overall. This international benchmarking system renders Five Star universities as world-class in areas such as Teaching, Employability, Facilities, Innovation, Internationalisation and Inclusiveness.



Athena SWAN

We're serious about gender equality. We want an equal number of men and women on our science and engineering courses, for instance. Our commitment was recognised in 2015 and again in 2020 and 2022 with the Athena SWAN Bronze Award.

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A Level Practicals

Ecosystems under stress: The effects of human activity. Creating glacial landscapes and mapping glacier change. Human intervention in coastal landscapes. Understanding place through quantitative and qualitative m Globalisation in the contemporary world.

Discover Lectures

Discover Lectures: Various topics in Human Geography and Phys

How to book

To book and arrange your geography outreach practical or virtual lecture please email the science outreach office: science.outreach@hud.ac.uk

All our practicals are free of charge.



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Course information

If you'd like more information about Environmental and Analytical Science BSc(Hons), Geography BSc(Hons), Human Geography BSc(Hons) and Physical Geography BSc(Hons) degrees here at the University of Huddersfield, please contact:

Ryan Wilson Admissions tutor Email: <u>r.wilson@hud.ac.uk</u>

A Level Practicals

Welcome

At the University of Huddersfield, we are committed to inspiring the next generation of geographers through our relationships with schools and colleges. We are always looking at ways to establish, build and strengthen these relationships by offering innovative and relevant activities which are of value to both teachers and learners.

We are delighted to introduce our range of Geography Outreach Sessions. These are a new suite of A Level Practicals and Discover Lectures, that correspond to the Edexcel and AQA geography syllabi, across a range of physical and human geography topics.

We aim to provide sessions that will broaden learner knowledge by sparking interest and encouraging geographical enguiry.

A Level Practicals

- Want to provide something different for your learners? Whether you want them to have a fully immersive practical experience or need additional access to resources, we offer carefully designed human and physical geography practical sessions that meet the requirements of the Edexcel and AQA syllabi.
- They can be used in place of a practical usually taught by a teacher, or be used in addition to practicals taught in school or college.
- The sessions are delivered by our University staff and provide an opportunity to use specialist equipment, where applicable, and to experience university teaching. Most practicals are designed to be delivered on campus, and some can be delivered in your school or college.
- Practical sessions will last for approximately 2 hours.

Discover Lectures

- Discover lectures are designed to assist in learning across a range of themes that match the current A Level curriculum. These lectures will last for approximately 45 minutes.
- They allow learners to engage with specialist staff and learn about current research being undertaken.
- Discover lectures will be delivered at your school or college, or virtually through online platforms, such as MS Teams.

Your Visit

- Lunch is not supplied, but your learners will be provided a room to eat their own packed lunch.
- A tour, by one of our student ambassadors, of the facilities in Applied Sciences and the University campus can also be included.

In this guide

You'll find details of each of the Geography sessions, where they can be delivered and for the A Level Practicals how these meet the A Level curriculum.

Ecosystems under stress: The effects of human activity.

Why is this relevant for your learners?

Understanding the processes that drive ecosystems from a global to local level is important to be able to determine the effect that humans are having on the natural world. Biological communities will interact with climate and other environmental variables to determine the location of the world's biomes. Many species have adapted to live in particular environments, but how will species and habitats respond to changes caused by human activity?

In this practical, learners will have the opportunity to use specialist equipment to understand the nature of ecosystems (from a global to local scale) and assess the effect that humans are having on species and habitats.

This session will last for 2 hours.



Creating glacial landscapes and mapping glacier change.

Why is this relevant for your learners?

Glaciers shape and modify the landscapes they occupy and, during periods of deglaciation, they leave behind clues about their past extent, dynamics and periods of advance/retreat. Currently, glaciers around the world are undergoing retreat and thinning in response to climate change resulting in the emergence of newly exposed glacial features in places such as the Himalayas, European Alps and the South American Andes. In this practical session, your learners will learn about glaciated landscapes by actively creating a range of features using interactive glacial sandboxes. These creations will be compared to real glacial

landscapes around the world to help better understand the processes that result in their development. Today, glacier changes (which have important implications in terms of water resources and sea level rise) are continually monitored by a range of satellite sensors orbiting the Earth. Using images acquired by these satellites, learners will also have the opportunity to visualise and measure the retreat of individual glaciers. This experience will allow learners to better comprehend the impacts of climate change on glaciers and their landscapes.

This session can run between 2-3 hours.

How this practical meets the A Level curriculum:

AQA

- 3.16 Ecosystems under stress
 - 3.1.6.2 Ecosystems and processes
 - 3.1.6.3 Biomes
 - 3.1.6.6 Local ecosystems

Edexcel

• Area of study 3: Physical systems and Sustainability

This practical is available at:

• The University of Huddersfield

How this practical meets the A Level curriculum:

AQA

- 3.1.4 Glacial systems and landscapes
 - 3.1.4.1 Glaciers as natural systems
 - 3.1.4.2 The nature and distribution of cold environments
 - 3.1.4.3 Systems and processes
 - 3.1.4.4 Glaciated landscape development
 - 3.1.4.6 Quantitative and qualitative

Edexcel

- Area of study 1: Dynamic Landscapes
 - Topic 2: Landscape Systems, Processes and Change
 - Option 2A: Glaciated
 - Landscapes and Change

This practical is available at:

- The University of Huddersfield
- Your school or college

A Level Practicals

A Level Practicals

Globalisation in the

contemporary world.

Why is this relevant for your learners?

Globalisation impacts every aspect

explore the multiple ways in which

we are linked to the flow of goods,

services, capital, resources, and

people across the planet.

In this practical, learners will

have the opportunity to engage

with the multifaceted nature of

origins and geographical pathways

that various items take as they are

assembled and transported to their

globalisation by exploring the

intended destinations.

of our daily lives. It is therefore

important to understand and

Human intervention in coastal landscapes.

Why is this relevant for your learners?

This practical will introduce a range of approaches to managing the risks associated with coastal erosion, including hard and soft engineering interventions and the sustainability of these approaches. The session will include an interactive activity

based on a real-world case study (e.g. the Holderness coast) in which the consequences of different management interventions are explored.

This session will last for 2 hours.

COur learners loved the lecturer's passion for sand dunes and thought their delivery was engaging, they also liked the relevance to the economic/social importance of sand dunes (as well as the environmental) and enjoyed learning about something outside of their specification.

Teacher's feedback – Greenhead College, Huddersfield.

Understanding place through quantitative and qualitative methods.

Why is this relevant for your learners?

How we experience and perceive places can have a big influence on both our sense of who we are (our identities) and how we view and engage with other people and places.

In this interactive practical, learners will have the opportunity to access datasets and consider how we come to perceive and know places through both quantitative and qualitative data and examine why it is important to think critically about a sense of place.

This session will last for 2 hours.

How this practical meets the A Level

• 3.2.2.1 The nature and

importance of places • 3.2.2.2 Changing places

relationships, connections,

meaning and representation

curriculum:

• 3.2.2 Changing places

• Topic 4: Shaping Places

Your school or college

This practical is available at:

• The University of Huddersfield

AQA

Edexcel

How this practical meets the A level curriculum:

AQA

- 3.13 Coastal systems and landscapes
 - 3.1.3.4 Coastal management

Edexcel

 Area of study 2B: Coastal Landscape and Change (specifically 2B.11 – 2B.12)

This practical is available at:

The University of Huddersfield

Discover Lectures

Why are these relevant for your learners?

Discover lectures are designed to assist with learning across a range of geographical themes, that correspond to the current Geography A Level curriculum. Lectures will be delivered by our University staff whose research expertise closely aligns with content in the Geography curriculum. Lectures aim to broaden learners' knowledge and provide experience of university-based teaching and learning.

Discover lectures will be delivered at your school or college, or virtually through virtual media, such as MS Teams.

These sessions last for approximately 45 minutes

- and evolution
- Hazards
- River habitats
- ecosystems



6 Our learners were equally positive about learning more about South Africa. The topic and case studies extended some of their learning at A Level but the lecturer's knowledge and personal experiences of working in other Geography related careers really opened their eyes and inspired them to a world of employment outside of the classroom.

Teacher's feedback – Greenhead College, Huddersfield

Everyday objects will be examined, including cell-phones (and

- other electronics), clothing, and
- foodstuffs. Learners will have the
- opportunity to see how closely
- linked and interdependent we
- are globally and discuss the various
- advantages and disadvantages

(economic, social, and

environmental) that can come from globalisation in the modern world.

This session last for 2 hours.

How this practical meets the A Level curriculum:

AQA

- 3.2.1 Global systems and global governance
 - 3.2.1.1 Globalisation
 - 3.2.1.2 Global systems

Edexcel

- Area of study 2: Dynamic Places
 - Topic 3: Globalisation

This practical is available at:

- The University of Huddersfield
- Your school or college

Available topics include:

• Physical Geography

- Glacial environments
- Past environments
- Water and nutrient cycles
- Biogeography and
- Remote sensing and GIS
- Coastal landscapes

• Human Geography

- Globalisation
- Global systems and inequality
- Geography and identity
- Migration
- Cities and urbanisation
- Understanding place and space
- Population change, health, and well-being
- Geopolitics
- Sustainability and resource management
- Mobilities



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