



## Introduction to GIS and health-environment research applications

### Course Overview

**Date:** 16<sup>th</sup> October 2013

**Time:** 9.30am – 5pm

**Provider:** European Centre for Environment & Human Health (University of Exeter Medical School)

**Venue:** The Knowledge Spa, Treliske, Truro TR1 3HD

*All sessions in room S30. (Computer lab located within the Knowledge Spa library)*

**Cost:** *Free of charge*

This one day course will give an introduction into Geographic Information Systems (GIS), their value, and how to use them, particularly in the health and environment sector.

Dr Ben Wheeler, Senior Research Fellow at the European Centre for Environment and Human Health will lead the course. Ben is an expert in the field of GIS and spatial analysis as well as the use of large, national and international secondary datasets.

Participants will gain an insight into the application of GIS through a variety of presentations and practical sessions. They will become familiar with the different stages of GIS projects, visualisation & presentation of geographical data, spatial analysis, practicalities such as data licensing and copyright issues, and mapmaking.

Lunch will be provided and there will be coffee breaks throughout the day.





Time	Session	Content
<b>9.00-9.30</b>	<b>Registration</b>	<b>Room S30, off library</b>
9.30-10.15	Talk 1: Introduction	<ul style="list-style-type: none"><li>• Course aims</li><li>• What is a GIS?</li><li>• What is Geographic Information?</li><li>• What do you need to know?</li><li>• What can GIS be used for in environment/health research?</li></ul>
10.15-11.00	Practical 1	Quantum GIS (QGIS): <ul style="list-style-type: none"><li>• Introduction to using QGIS</li></ul>
<b>11.00-11.30</b>	<b>Coffee</b>	<b>In ECEHH Atrium</b>
11.30-12.00	Talk 2 - GIS for Health and Environment Research	<ul style="list-style-type: none"><li>• Use of GIS and mapping in health &amp; environment research</li><li>• Potential applications</li><li>• Limitations</li></ul>
12.00-12.45	Practical 2	Mapping data with QGIS
<b>12.45-1.30</b>	<b>Lunch</b>	<b>In Room G05</b>
1.30-2.15	Talk 3 - stages of a GIS project	<ul style="list-style-type: none"><li>• Data capture &amp; collection</li><li>• Cleaning &amp; verification</li><li>• Analysis</li><li>• Presentation/visualisation</li><li>• Storage &amp; Backup</li></ul>
2.15-3.00	Practical 3	Getting data into QGIS
<b>3.00-3.30</b>	<b>Coffee</b>	<b>In ECEHH Atrium</b>
3.30-4.15	Talk 4 - Spatial analysis & data sources	<ul style="list-style-type: none"><li>• Overlays</li><li>• Distance analysis</li><li>• Georeferenced UK data</li><li>• Licensing and copyright issues</li><li>• Software</li><li>• Further training</li></ul>
4.15-5.00	Practical 4	<ul style="list-style-type: none"><li>• Making maps</li><li>• Evaluations</li></ul>

