GIS for Public Health
5-day short course
Monday 18th – Friday 22nd July 2016

COURSE DESCRIPTION
Geographic Information Systems (GIS) have become a powerful and flexible tool used by many researchers and practitioners in the field of public health.

This specialist workshop on GIS for Public Health offers an introduction to GIS and how it is used in public health and epidemiological research. You will learn how to use GIS to prepare and analyse data for studies of environment and health, use GIS to assess exposures to environmental pollution, and explore and analyse patterns and the spread of disease.

Specific skills and tools will be introduced in relation to assessing exposure to a range of environmental risks, and a particular focus will be given to methods for linking geographical and health data for epidemiological studies and health risk assessment.

The course will offer a mixture of lectures, demonstrations and hands-on exercises in ArcGIS10.2.

TARGET AUDIENCE
Public health practitioners, epidemiologists, exposure scientists, quantitative health geographers, risk assessors, students

LOCATION
St Mary’s Campus, Imperial College London, London, UK
**OBJECTIVES**

Introduction to the fundamentals of GIS and how spatial data handling and analysis can enhance public health research. In particular the course will include:
- Introduction to GIS including integrating, visualising and mapping spatial data
- Introduction to exposure assessment techniques
- Calculating and mapping cases and rates of attributable risk
- Analysing accessibility to health care facilities

**OUTCOMES**

You will learn how to:
- Work with and integrate spatial and non-spatial data
- Integrate data of different geographic scales and spatial precision
- Geocode and visualise spatial data
- Undertake spatial analysis of environment and health data
- Investigate spatial patterns of health risks and disease rates
- Produce thematic maps

**REQUIREMENTS**

No prior knowledge of GIS is required.

Participants will be working on PCs already set up with ArcGIS 10.2 and there is no need to bring a laptop.

**REGISTRATION**

Register online on our homepage (http://www.sahsu.org/content/gis-public-health-short-course) or send an email to: d.fecht@imperial.ac.uk

Registration opens on 15th January 2016

**COURSE LEADERS**

Dr John Gulliver, Imperial College London
Dr Daniela Fecht, Imperial College London

**NUMBER OF PLACES**

30 places allocated on a first come first served basis

**COURSE FEES**

Internal (Imperial & PHE): £500
External: £800