

Liverpool John Moores University

Title: PHI 3: MAPPING AND MODELING PUBLIC HEALTH
Status: Definitive
Code: **7008PHEALT** (106936)
Version Start Date: 01-08-2014

Owning School/Faculty: Centre for Public Health
Teaching School/Faculty: Centre for Public Health

Team	Leader
Ivan Gee	Y

Academic Level: FHEQ7
Credit Value: 15.00
Total Delivered Hours: 24.00
Total Learning Hours: 150
Private Study: 126

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	10.000
Practical	14.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	MapMod Rep	Project report examining geographical differences for current and predicted public health indicators.	100.0	

Aims

To provide participants with the skills and knowledge to meaningfully map public health outcomes, assess changes in public health using demographic segmentation methods and to model future changes in public health.

Learning Outcomes

After completing the module the student should be able to:

- 1 Apply methodological rigour in the application of geographical information systems, demographic segmentation and predictive modeling techniques to public health datasets.
- 2 Critically assess the application of these techniques for the evaluation of public health inequalities.
- 3 Evaluate the effect of public health interventions on future health outcomes.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Mapping & Modelling Report 1 2 3

Outline Syllabus

Principles of geographical information systems (GIS) and cartographic techniques. Mapping public health indicators using GIS methods. Demographic segmentation methods and tools (e.g. People and Places, Mosaic etc) for use in understanding inequalities and social marketing. Predictive modeling and scenario analysis methods.

Learning Activities

Interactive lectures and seminars. Computer laboratory work

References

Course Material	Book
Author	APHO
Publishing Year	2009
Title	Technical Briefing 5
Subtitle	Geodemographic Segmentation
Edition	
Publisher	APHO
ISBN	

Course Material	Book
Author	Cromley
Publishing Year	2002
Title	GIS and Public Health
Subtitle	
Edition	
Publisher	Guilford.
ISBN	

Course Material	Book
Author	Dedman et al
Publishing Year	2006
Title	Population Targeting: Tools for Social Marketing. Liverpool
Subtitle	http://www.nwph.net/nwpho/publications/Synthesis 6 Socialmarketing.pdf
Edition	
Publisher	NWPHO
ISBN	

Course Material	Book
Author	Kurland
Publishing Year	2006
Title	GIS tutorial for health
Subtitle	
Edition	
Publisher	ESRI
ISBN	

Course Material	Book
Author	Maheswaran & Craglia
Publishing Year	2004
Title	GIS in public health practice
Subtitle	
Edition	
Publisher	CRC Press
ISBN	

Course Material	Book
Author	UK Borders
Publishing Year	2009
Title	Boundary datasets of the United Kingdom
Subtitle	http://edina.ac.uk/ukborders/
Edition	
Publisher	Edina
ISBN	

Notes

This module will provide theoretical knowledge and practical skills in the key areas of public health mapping, geographical segmentation and predictive modeling. Participants will have the opportunity to apply these techniques to examples of public health data and to explore the implications for improving understanding of public health problems and targeting of interventions using social marketing.