

Module Code	ACCA5027
Title	Geographical Information Systems
Date	09/09/2020
Level	5
Credits	20
Pre-Requisites	None

AIM(S)

- To introduce the student to the science technology and management of geographical information. The student should develop a critical understanding of the underlying theories of GIS through examination of current GIS software trends. A coherent understanding of geovisualisation is regarded as a key concept and will be developed throughout the module.

LEARNING OUTCOMES

Upon the successful completion of this module, the student should be able to:

- Evaluate and critically appraise a variety of application areas, which could benefit from a GIS solution.
- Demonstrate a conceptual understanding of visual perception and communications.
- Accurately identify spatial databases and understand the concepts of manipulating and representing spatial data solutions.

INDICATIVE CONTENT

- Identifying types of data involved in Geo-information systems including DIGIMAP.
- Fundamental theories of spatial databases and spatial analysis including SQL.
- Geovisualisation and cartographic representation of sociodemographic data.
- The principles of thematic mapping and attributes of spatial data sets.
- Evaluating usage of GIS within the organisations including location-based services, location intelligence and epidemiology studies.
- Using appropriate GIS software for data analysis.
- Development of end user GIS applications

Study Time Allocation

The study time for the module is divided as follows:

Activity type	Hours	Percentage
Scheduled learning	48	24%

Independent learning	152	76%
Placement learning	0	0%
TOTAL	200	100%

ASSESSMENT

Assessment Component 1

☐ Written exam
 ☒ Coursework
 ☐ Practical

Mode of assessment	Volume	Weighting
Research Report	2500 words	50%

Assessment Component 2

☐ Written exam
 ☒ Coursework
 ☐ Practical

Mode of assessment	Volume	Weighting
Report / Demo	2500 words	50%

Assessment Summary

Activity type	Percentage
Written exam	0%
Coursework	100%
Practical	0%
TOTAL	100%

INDICATIVE READING LIST

Module Code	ACCA5027	
Module Title	Geographical Information Systems	
Classification	Reading List entry	Electronic*
Essential	Longley, P, Goodchild, M, Maguire, D, Rhind, D (2015) <i>Geographical Information Systems and Science</i> , Wiley	☒
Essential	Heywood, I., Cornelius, S. and Carver, S. (2011) <i>An Introduction to Geographical Information Systems</i> , Prentice Hall	☒
Further	Daniel, L., Loree, P. and Whitener, A. (2002) <i>Inside MapInfo Professional</i> , Onward Press,	☐
Further	Worboys, M. and Duckham, M. (2004)	☐
Further	Whitener, A. (1997) <i>MapBasic Developers Guide</i> , Onword Press	☐
Further	http://www.mapinfo.co.uk	☒
Further	http://www.agi.org.uk/	☒
Further	http://www.ordnancesurvey.co.uk/oswebsite/	☒
Further	http://ukdataservice.ac.uk/	☒
Further	http://digimap.edina.ac.uk/digimap/home	☒