Liverpool John Moores University

Title:	GEOGRAPHIC INFORMATION SYSTEMS
Status:	Definitive
Code:	**7502SCSUCR** (125667)
Version Start Date:	01-08-2019

Owning School/Faculty:	Natural Sciences & Psychology
Teaching School/Faculty:	Southern Connecticut State University

Team	Leader
Jason Kirby	Y

Academic Level:	FHEQ7	**Credit Value:**	16	**Total Delivered Hours:**	18
Total Learning Hours:	160	**Private Study:**	142		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	6
Practical	12

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	GIS work	Portfolio of practical and conceptual GIS work	100	

Aims

To provide students with the technical skills necessary to operate a GIS and open/create, manipulate, and present spatial data.
To understand the fundamental technical concepts of modern GIS software packages and apply them to geographical data.

Learning Outcomes

After completing the module the student should be able to:

1   Critically understand the foundation concepts of GIS theory and how this is used in active software contexts.
2   Demonstrate professional capacity to use the industry standard GIS software package AcrGIS and open source software (e.g. Q-GIS) to visualise, modify and present spatial data.
3   Apply GIS analysis to coastal data to evaluate the coastal features, processes and risks of that location.

Learning Outcomes of Assessments

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

Portfolio of GIS work   1   2   3

Outline Syllabus

Introduction to GIS. Co-ordinate systems and map projections. Co-ordinate data, Vector vs Raster Models. Digitising and co-ordinate capture. Database components and characteristics. Attribute tables.

Learning Activities

Lectures, practicals and workshops.

Notes

This module provides part of the foundational skills component of the Masters in Coastal Resilience. It introduces students to geospatial data theory and data management, which is fundamental to the spatial analysis of coastal processes and the development of project plans. It is part of the core program level learning objective relating to the collection, management, visualisation, and analysis of relevant spatial data using proprietary and open source software.