Liverpool John Moores University

Title:	Geographic Information Science and Geo-computation for Public Safety
Status:	Definitive
Code:	**6106PS** (122738)
Version Start Date:	01-08-2019

Owning School/Faculty: Justice Studies
Teaching School/Faculty: Justice Studies

Team	Leader
Adegbola Ojo	Y

Academic Level:	FHEQ6	**Credit Value:**	20	**Total Delivered Hours:**	55
Total Learning Hours:	200	**Private Study:**	145		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Tutorial	11
Workshop	22

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	1500 word essay	40	
Report	AS2	3000 word report	60	

Aims

This module seeks to provide an introduction to the field of crime analysis and crime mapping for students. It will cover some history, key concepts, data, as well as analytical methods and specific techniques used in the discipline of crime science. The module will focus on the practical application of fundamental Geographic Information Systems (GIS) concepts and how they can be adapted for understanding

and interpreting crime patterns.

Learning Outcomes

After completing the module the student should be able to:

1   State, explain and assess core concepts underpinning crime pattern analysis.
2   Differentiate and select appropriate techniques for analysis, mapping and interpreting crime data.
3   Demonstrate basic or intermediate level of proficiency in the use of at least one GIS software package to examine a chosen issue

Learning Outcomes of Assessments

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

1500 words   1

Report 3000 words   2   3

Outline Syllabus

. Crime analysis and the Policing Profession
. Crime Analysis: Why Geography Matters
. Theoretical Frameworks of Crime Pattern Analysis
. Geographic Information Science and Systems: an introduction
. Geographic Data and Crime Mapping
. Adding Geography to Crime Data
. Spatial Statistics for Crime Analysis
. Identifying and interpreting Crime Patterns
. Hot-Spots Analysis

Learning Activities

The module will adopt a blended learning approach. This will combine e-learning techniques with more traditional teaching methods. Lectures and online learning materials will be used to provide an overview of each topic. the lectures will be delivered mainly by the module team.   Guest speakers with varying relevant professional expertise may also be invited from time to time to deliver lectures within the curriculum. Workshops will be lab-based offering students the opportunity to undertake practical applications of theoretical concepts and techniques.

Notes

The module will expose students to a range of mixed-methodological techniques with a strong quantitative element. Students will also be trained to use at least one GIS software package and will be encouraged to understand its interoperability with other

software.