TIFFIN
UNIVERSITY

ENF622 Geographic Information Systems in Criminal Justice (3 credit hours)
Syllabus

Course Description
The focus of the class is to provide an overview of Geographic Information Systems (GIS) and the techniques used in the study of criminal justice. This class will cover some of the major concepts that can aid law enforcement in becoming more efficient in the decision making process in the areas of tactical, strategic, and operational functions. The course will focus on both the theoretical work, which will give a fundamental grounding in the work of environmental criminologists, and in practical application, giving you an understanding of how GIS is applied in law enforcement.

Course Learning Outcomes (CLOs)
By the end of this course, the student will be able to do the following:
1. Define and implement basic crime mapping concepts
2. Explain the various ways crime mapping aids law enforcement
3. Name spatial theories supporting GIS
4. Explain and implement hot spot mapping
5. Use local community data to support crime mapping functions
6. Analyze change over time and space
7. Describe operational uses of GIS
8. Recognize the tactical and investigative uses of GIS
9. Use GIS to police causes of crime
10. Develop skills in cartography
11. Manage GIS systems within law enforcement

Course Topics
GIS basics
Spatial theories of crime
Crime maps Hotspot
mapping Local
community data
Mapping & analyzing change
GIS application
Mapping for police operations
Tactical and investigative mapping
Policing the causes of crime
Cartography
Management and organization of crime mapping

Course Prerequisites/Corequisites
ENF532 Computer Applications in Crime Analysis

Required Textbook(s) and Resources
These are the materials you will need to purchase for the course:

Chainey, S., & Ratcliffe, J. (2006). *GIS and crime mapping*. West Sussex, England: John Wiley & Sons Ltd. ISBN: 9780470860991

Some lectures/activities may contain additional resources. See individual lectures/activities for those requirements. Where applicable, Tiffin University has obtained permission to use copyrighted material.

Minimum Student Technology Requirements
In order to have a quality learning experience in your online courses, the University requires that your primary computer (the computer used to access course materials and on which you will be required to install course-specific software) meets or exceeds the following specifications:

- 500 MHz or better CPU;
- 256 MB Memory (RAM);
- working CD-Rom drive;
- 3 GB Hard disk; and
- working microphone and speakers.

Students are also required to meet the following general technology requirements:

- have administrator rights on their PC to install software;
- access to **broadband** internet;
- have a current web browser installed, such as Internet Explorer or Firefox;
- have Adobe Flash plug-in installed;
- have Apple QuickTime plug-in installed;
- have Adobe Reader (free download) installed; and
- have Microsoft Office Suite (Word, Excel, PowerPoint) installed.

In this course, there is an optional, but highly recommended track that requires additional software, text and hardware requirements. This will be communicated to you by the instructor in Week 1.

Time Management
Time management is an important part of academic success. Please refer to the approximate (average) times noted below for readings and assignments to help plan your time accordingly.

Course Content
Please refer to individual activities for assessment guidelines.

WEEK 1	
Course Topics	GIS Basics

Read/Review			Approx. Time
Textbook, Lectures, and Other Resources	Textbook: Chainey & Ratcliffe: Chapters 1, 2, 3 File: Fundamentals of Crime Analysis - Ch. 1 (in Course Documents) File: Introduction: Mapping and Crime Prevention (in Course Documents) File: Mapping Crime - Principal and Practice - Ch 1 (in Course Documents) File: Scavenger Hunt Worksheet (in Course Documents) File: Vocabulary Worksheet (in Course Documents)		3 hrs. 1 hrs. 1 hrs. 1 hrs.
Activity Type	**Course Learning Outcomes**	**Due**	**Approx. Time**
Introductory Discussion	CLO(s): n/a	Monday	1 hrs.
Discussion: Initial Post	CLO(s): 1	Wednesday	4 hrs.
All Discussions: Secondary Posts	CLO(s): 1, 2	Saturday	2 hrs.
Assignment 1: Definitions	CLO(s): 1	Sunday	2 hrs.
Assignment 2: Scavenger Hunt	CLO(s): 2	Sunday	3 hrs.
Introduction: Research Paper	CLO(s): 2	Week 7	3 hrs.
Approximate Weekly Time on Task (includes resources and activities)			**21 hrs.**

WEEK 2			
Course Topics	Spatial theories of crime Crime maps		
Read/Review			**Approx. Time**
Textbook, Lectures, and Other Resources	Textbook: Chainey & Ratcliffe: Chapter 4 File: Manual of Crime Analysis Map Production (in Course Documents) File: Mapping Crime - Principle and Practice - Ch 1 (in Course Documents)		1.5 hrs. 1 hr. 1 hr.
Activity Type	**Course Learning Outcomes**	**Due**	**Approx. Time**
Discussion: Initial Post	CLO(s): 1, 2	Wednesday	4 hrs.
All Discussions: Secondary Posts	CLO(s): 1	Saturday	2 hrs.
Assignment 1: Essay	CLO(s): 2	Sunday	2 hrs.
Assignment 2: Abstract (for Research Paper)	CLO(s): 2	Sunday	3 hrs.
Approximate Weekly Time on Task (includes resources and activities)			**16.5 hrs.**

WEEK 3			
Course Topics	Hotspot mapping Local community data		
Read/Review			**Approx. Time**
Textbook, Lectures, and Other Resources	Textbook: Chainey & Ratcliffe: Chapters 6, 7 File: Mapping Crime - Understanding Hot Spots, Ch. 1 (in Course Documents)		3 hrs. 1 hrs.
Activity Type	**Course Learning Outcomes**	**Due**	**Approx. Time**
Discussion: Initial Post	CLO(s): 2, 3, 4, 6	Wednesday	4 hrs.
All Discussions: Secondary Posts	CLO(s): 2, 3, 4, 6	Saturday	2 hrs.
Assignment 1: Essay	CLO(s): 1,4	Sunday	3 hrs.
Assignment 2: Essay	CLO(s): 1, 2, 6	Sunday	5 hrs.
Approximate Weekly Time on Task (includes resources and activities)			**18 hrs.**

WEEK 4			
Course Topics	Mapping & analyzing change Practical application		
Read/Review			**Approx. Time**

Textbook, Lectures, and Other Resources	Textbook: Chainey & Ratcliffe: Chapter 8 File: CMAPS Workbook (in Course Documents) Files: GIS Tutorial for Crime Analysis (in Course Documents) Link: ESRI Free software trial (http://www.esri.com/software/arcgis/arcgis-for-desktop/free-trial)	1.5 hrs.

Activity Type	**Course Learning Outcomes**	**Due**	**Approx. Time**
Discussion: Initial Post	CLO(s): 7, 8	Wednesday	4 hrs.
All Discussions: Secondary Posts	CLO(s): 7, 8	Saturday	2 hrs.
Assignment 1: Resources (for Research Paper)	CLO(s): 7	Sunday	3 hrs.
Assignment 2: Choice Activity	CLO(s): 1	Sunday	5 hrs.
Approximate Weekly Time on Task (includes resources and activities)			**15.5 hrs.**

WEEK 5		
Course Topics	Mapping for police operations Tactical and investigative mapping	
Read/Review		**Approx. Time**
Textbook, Lectures, and Other Resources	Textbook: Chainey & Ratcliffe: Chapters 9,10 File: CMAPS Workbook (in Course Documents)	3 hrs.

Activity Type	**Course Learning Outcomes**	**Due**	**Approx. Time**
Discussion: Initial Post	CLO(s): 8, 9	Wednesday	4 hrs.
All Discussions: Secondary Posts	CLO(s): 8,9	Saturday	2 hrs.
Assignment 1: Essay	CLO(s): 9	Sunday	3 hrs.
Assignment 2: Choice Activity	CLO(s): 1, 10	Sunday	5 hrs.
Midterm Exam	CLO(s): 1, 2, 3, 4, 5, 6	Sunday	2 hrs.
Approximate Weekly Time on Task (includes resources and activities)			**19 hrs.**

WEEK 6		
Course Topics	Policing the causes of crime Cartography	
Read/Review		**Approx. Time**
Textbook, Lectures, and Other Resources	Textbook: Chainey & Ratcliffe: Chapters 11,12 File: CMAPS Workbook, Chapters 7-8 (in Course Documents)	3 hrs.

Activity Type	**Course Learning Outcomes**	**Due**	**Approx. Time**
Discussion: Initial Post	CLO(s): 9 ,10	Wednesday	4 hrs.
All Discussions: Secondary Posts	CLO(s): 9, 10	Saturday	2 hrs.
Assignment 1: Essay	CLO(s): 9	Sunday	3 hrs.
Assignment 2: Choice Activity	CLO(s): 1, 10	Sunday	5 hrs.
Approximate Weekly Time on Task (includes resources and activities)			**15 hrs.**

WEEK 7		
Course Topics	Management & organization of crime mapping Final wrap up	
Read/Review		**Approx. Time**
Textbook, Lectures, and Other	Textbook: Chainey & Ratcliffe: Chapter 13	1.5 hrs.

Resources			
Activity Type	**Course Learning Outcomes**	**Due**	**Approx. Time**
Discussion: Initial Post	CLO(s): 11	Wednesday	4 hrs.
All Discussions: Secondary Posts	CLO(s): 11	Saturday	2 hrs.
Assignment 1: Essay	CLO(s): 11	Thursday	3 hrs.
Assignment 2: Research Paper (Final Draft)	CLO(s): 2	Thursday	8 hrs.
Final Exam	CLO(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	Sunday	5 hrs.
Approximate Weekly Time on Task (includes resources and activities)			**23.5 hrs.**

Approximate Time on Task for Entire Course	**128.5 hrs.**

Grading Structure

Activity	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
Introductory Discussion	n/a							**n/a**
Discussion 1	20	20	20	20	20	20	20	**140**
Discussion 2	20	20	20	20	20	20		**120**
Assignment 1	30	30	30	35	30	30	30	**215**
Assignment 2	25	25	25	25	25	25		**150**
Midterm Exam					50			**50**
Final Exam							50	**50**
Research Paper							100	**100**
Total	**95**	**95**	**95**	**100**	**145**	**95**	**200**	**825**

Activity Categories	Percentage of Total Points
Discussion	32%
Assignments	44%
Research Paper	12%
Midterm	6%
Exam	6%
Total	**100%**

Grading Scale	
Grade	**Percentage**
A	90-100%
B	80-89%
C	70-79%
F	<70%

Please see the Course Policies document for grade appeal information.

Course Policies and University Services

Course Policies
Additional requirements for the course can be found in the Course Policies document. Please read the document and familiarize yourself with those policies to guide you through the course.

FERPA

The Family Educational Rights and Privacy Act (FERPA) protects student information. Other than directory information, such as name, address, phone number, etc., students must give consent for individuals to gain access to a student's educational record, including grades, transcripts, and behavior reports (unless the student is under the age of 18). Students also have the right to review their educational records. For a more detailed explanation, please see the Student Handbook.

Office of Disability Services
Please refer to your Moodle Home page for Office of Disability Services contact information to coordinate reasonable accommodations for students with documented disabilities.

Veterans
Please refer to your Moodle Home page for services for veterans, service members, and their families.

Moodle and Non-Moodle Technical Support
Blackboard Student Services will provide 24x7 Moodle helpdesk support for all Tiffin University students and faculty. Locate contact information for Blackboard Student Services (Moodle-related issues) and for Tiffin University ITS helpdesk (non-Moodle related issues) on your Moodle Home page.