

**STATE UNIVERSITY OF NEW YORK  
COLLEGE OF TECHNOLOGY  
CANTON, NEW YORK**



**MASTER SYLLABUS**

**JUST 402 – GIS: Crime Mapping**

**Created by: N. Wildey**

**Updated by:**

**SCHOOL OF SCIENCE, HEALTH, & CRIMINAL JUSTICE  
CRIMINAL JUSTICE DEPARTMENT  
SPRING 2019**

- A. **TITLE:** GIS: Crime Mapping
- B. **COURSE NUMBER:** JUST 402
- C. **CREDIT HOURS:** 3 credit hour(s); 3 lecture hours per week for 15 weeks
- D. **WRITING INTENSIVE COURSE:** No
- E. **GER CATEGORY:** N/A
- F. **SEMESTER(S) OFFERED:** Spring/Fall
- G. **COURSE DESCRIPTION:** This course provides an introduction to geographic information systems and their use in public safety and crime mapping. This course introduces students to how to use maps to analyze crime, how to analyze spatial data, and how maps can help researchers evaluate programs and policies. Additionally, students are introduced to various software applications that are standard in the industry.
- H. **PRE-REQUISITES/CO-REQUISITES:**
- a. Pre-requisite(s): Completion of 45 credit hours or permission of instructor.

I. **STUDENT LEARNING OUTCOMES:**

<b><u>Course Student Learning Outcome [SLO]</u></b>	<b><u>PSLO</u></b>	<b><u>GER</u></b>	<b><u>ISLO</u></b>
a. Explain the types of crime analysis	Demonstrate the ability to synthesize, analyze or evaluate homeland security issues and challenges.	n/a	<b>Communication Skills</b> <i>Written [W]</i>
b. Demonstrate use of the SARA model	Demonstrate the ability to synthesize, analyze or evaluate homeland security issues and challenges.	n/a	<b>Critical Thinking</b> <i>Critical Analysis [CA]</i>
c. Apply spatial analysis techniques	Construct, compose, and deliver professional research, reports, and intelligence briefings.	n/a	<b>Critical Thinking</b> <i>Critical Analysis [CA]</i>
d. Create analysis products for specific demographics	Construct and present coherent, objective, and well-reasoned arguments or discussions pertaining to topics on homeland security.	n/a	<b>Industry, Professional, Discipline Specific Knowledge and Skills</b>

<b>KEY</b>	<b><u>Institutional Student Learning Outcomes [ISLO 1 – 5]</u></b>
<b>ISLO #</b>	<b>ISLO &amp; Subsets</b>
<b>1</b>	<b>Communication Skills</b> <i>Oral [O], Written [W]</i>
<b>2</b>	<b>Critical Thinking</b> <i>Critical Analysis [CA], Inquiry &amp; Analysis [IA], Problem Solving [PS]</i>
<b>3</b>	<b>Foundational Skills</b> <i>Information Management [IM], Quantitative Lit./Reasoning [QTR]</i>
<b>4</b>	<b>Social Responsibility</b> <i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i>
<b>5</b>	<b>Industry, Professional, Discipline Specific Knowledge and Skills</b>

J. **APPLIED LEARNING COMPONENT:** Yes \_\_\_\_\_ No: x

K. **TEXTS:** All texts used for this course are Open Educational Resources (OER) and available at no cost to the students. They will be made available in BlackBoard.

Boba, R. (2001). Introductory Guide to Crime Analysis and Mapping. U.S. Department of Justice, Community Oriented Policing Services.

Caplan, J. M. & Moreto, W. D. (2012). GIS Mapping for Public Safety, First Edition. Newark, NJ: Rutgers Center on Public Security.

Harries, K (1999). Mapping Crime: Principle and Practice. U.S. Department of Justice, Office of Justice Programs.

L. **REFERENCES:** TBD and available in BlackBoard.

M. **EQUIPMENT:** Computer with internet access.

N. **GRADING METHOD:** A-F

O. **SUGGESTED MEASUREMENT CRITERIA/METHODS:**

- Quizzes
- Assignments
- Final Exam
- Participation / Discussion Boards

P. **DETAILED COURSE OUTLINE:**

- I. Introduction to Crime Analysis
  - A. Types of crime analysis
  - B. Crime analysis model
- II. Introduction to Public Safety and Crime Mapping
  - A. Pin Mapping

- C. GIS Components
- III. Introduction to Problem Solving
  - A. SARA Approach to Problem Solving
- IV. Data and Geocoding
  - A. Types of data
  - B. Data integrity issues
  - C. Data management
- V. Spatial Analysis Techniques
  - A. Types of GIS software
  - B. ArcGIS
  - C. Google Earth
- VI. Product Formation and Dissemination
  - A. Creation of products using software
  - B. Understanding and targeting your audience

Q. **LABORATORY OUTLINE:** N/A