Methods and Techniques of Criminological Research

Prof. Serena Favarin; Prof Marco Dugato

Module 1: *Methods of Criminological Research* (Prof. Serena Favarin)

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to provide students with:

– theoretical and empirical knowledge on the research process, with specific reference to criminology;

– theoretical and empirical knowledge on the main research methods used in criminology;

– theoretical and empirical knowledge to plan a project of criminological research, also taking into account the ethical limits imposed on the researcher.

*Knowledge and understanding*

At the end of the course, students will be able to understand how to conduct criminological research, with reference to each phase (process), types of (deductive or inductive) thinking process to follow and data collection technique. In addition, they will be able to appreciate the ethical limits to be respected during research.

*Ability to apply knowledge and comprehension*

At the end of the course, students will be able to apply the theoretical and empirical knowledge acquired by setting up research projects, starting with the dissertation.

*Independence of judgement*

At the end of the course, students will have acquired a theoretical and empirical knowledge that will enable them to critically evaluate other people’s criminological research projects and to appreciate their strengths and limits. Independence of judgement will be developed through students’ active participation during lessons which will focus on the analysis of criminological researches already conducted.

***COURSE CONTENT***

During the module the following topics will be explored:

– Why conducting criminological research

– The process of criminological research and its phases.

* Methods of data collection: theory and analysis of criminological research already conducted.

– Criminological research and ethical implications.

* Preparing a research project.

***READING LIST***

Slides, lecture notes, scientific articles presented in class.

F.E. Hagan, *Research Methods in Criminal Justice and Criminology,* Pearson Educational Limited, Harlow, 2017 (10th ed.).

***TEACHING METHOD***

Lectures; practical classes on criminological studies already conducted aiming at identifying their research projects. Lectures will be mainly in English.

***ASSESSMENT METHOD AND CRITERIA***

Written exam.

Marks will be registered after passing this module and the other two modules of which this course consists. The final mark will be the weighted average of the marks obtained in the three modules.

***NOTES AND PREREQUISITES***

Si raccomanda la preventiva acquisizione dei concetti chiave di metodologia della ricerca sociale. Per chi sentisse la necessità di ripassarli si consiglia la lettura di questo volume: Piergiorgio Corbetta, *Metodologia e tecniche della ricerca sociale*, Il Mulino, Bologna, 2014.

In case the current Covid-19 health emergency does not allow frontal teaching, remote teaching and assessment will be carried out following procedures that will be promptly notified to students.

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG or on the Faculty notice board.

Module 2: *Techniques of Criminological Research* (Prof. Serena Favarin)

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course is an introduction to some of the most widely used techniques for analysing data in criminology. At the end of the course, students a) will have acquired the tools necessary to analyse data concerning victims of crime and progress of crime in space and time, b) will be able to understand, choose and apply the different techniques presented recognizing potential and limits, c) will have an overview of available data in the field of criminology.

***COURSE CONTENT***

The module will cover the following topics:

*The victim and the crime*

– Data on crime and criminality, and victimisation surveys.

– Analysis of victimisation.

*Crime trends over time*

– What does it mean that crime varies over time?

– Time series analysis.

*Crime distribution in space*

– What does it mean that criminality varies in space?

– Spatial analysis and GIS systems (geographic information system).

***READING LIST***

– Slides presented in class.

– Other materials presented in lectures (Excel sheets with exercises).

– Tutorial on basic function of QGIS software.

– Rogerson, *Crime Incidence, Prevalence and Concentration in NDCs: Implications for Practice*, Centre for Regional Economic and Social Research, November, 2004.

– Corbetta, Gasperoni e Pisati (2001) *Statistica per la ricerca sociale*, Il Mulino, pp. 137-141 or Corbetta (2003) *La ricerca sociale: metodologia e tecniche IV. L’analisi dei dati*, Il Mulino, 2003. Second edition. pp. 216-221

– Aebi (2004) “*Crime Trends In Western Europe from 1990 to 2000*”, European Journal on Criminal Policy and Research. Volume 10, Issue 2-3, pp 163–186.

– Weisburd (2015), “*The law of crime concentration and the criminology of place*”, Criminology, Volume 55, Number 2, pp 133-157.

– Tseloni (2014) “*Understanding Victimization Frequency*”, in Encyclopedia of Criminology and Criminal Justice edited by Bruinsma and Weisburd. Springer Reference

– Farrell and Pease (2014) "*Repeat Victimization*", in Encyclopedia of Criminology and Criminal Justice edited by Bruinsma and Weisburd. Springer Reference.

*In-depth study material (especially important for learning basic GIS concepts and the use of QGIS)*

- Introductory tutorial on the use of QGIS:

English: https://www.youtube.com/watch?v=WAbOR\_E2xtI

Italian: https://www.youtube.com/watch?v=9528-KVh9Kc

***TEACHING METHOD***

Classes will be held in the computer lab with theoretical lessons alternating with practical exercises. During the module some data analysis software will be introduced and used.

***ASSESSMENT METHOD AND CRITERIA***

Students must pass a written test based on course topics (slides + texts indicated in the reading list for attending students + exercises uploaded on Blackboard) which will include 6 open questions on theory (40 minutes - 12 points) and 4 exercises to be performed (50 minutes - 18 points). The sum of the two tests will equal the final exam mark (max 30 points).

If a pass mark is obtained, students will not be allowed to retake the test.

More details will be provided in class and in the syllabus.

The final mark of the course will be the weighted average of the tests for all three modules, under the condition that the obtained mark is equal or above 18. The average is rounded up.

***NOTES AND PREREQUISITES***

In case the current Covid-19 health emergency does not allow frontal teaching, remote teaching and assessment will be carried out following procedures that will be promptly notified to students.

Attendance is strongly recommended due to the practical nature of the course. Several exercises will be carried out in class with students. Furthermore, the course includes intensive use of Excel and introduction to the use of QGIS, programs that will also be used in module 3 of this course.

Updated programme, reading list, instructions and other documents will be published on the *Blackboard* page of the course. Blackboard will also be the tool for communicating changes in schedule, exam information and more.

All students (attending and non-attending, current and non-current) are invited to register for the course on *Blackboard* and to keep up to date (by kindly inserting their own e-mail address on *Blackboard* indicating clearly their name and surname).

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG or on the Faculty notice board.

Module 3: *Tools of Methodological Research* (Prof. Marco Dugato)

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to study in depth some techniques of spatial analysis introduced in Module 2 of the course. In the past years, criminal research has developed, thanks to new available technologies, new tools that consider the distribution of criminal events in space. These techniques are being increasingly applied in different areas fostering the analysis, anticipation, prevention, and fight against crime. At the end of the module students shall be able to understand, choose and apply the different tools analysed, recognising their potential and limitations.

***COURSE CONTENT***

During the course various techniques of spatial analysis will be presented and applied.

– Concentration analysis.

– Cluster analysis.

– Density analysis.

– Spatial autocorrelation analysis.

– Introduction to predictive models.

***READING LIST***

Main texts to supplement material provided in class are:

Recommended reading list:

*Basic*

R. Boba Santos, *Crime Analysis with Crime Mapping,* SAGE, 2013 (only chapters 6 and 14).

J. Eck and others (eds.), *Mapping Crime: Understanding Hotspots,* National Institute of Justice, 2005.

L. Anselin, *An Introduction to spatial autocorrelation analysis with GeoDa,* 2003.

L. W. Kennedy, J. M. Caplan and E. L. Piza, *A primer on the spatial dynamics of crime emergence and persistence*, 2012, Rutgers Center on Public Security

– Material provided in class.

*In-depth study*

L. Anselin and others, *‘Spatial Analyses of Crime’,* ed. by D. Dufee, Criminal Justice. Measurement and analysis of crime and justice, 4, 2000, pp. 213–62.

S. Chainey-J. Ratcliffe, *GIS and crime mapping,* Wiley, 2005, chapters 3-5-6-8-12.

M. Dugato, *Assessing the Validity of Risk Terrain Modeling in a European City: Preventing Robberies in the City of Milan,* Crime Mapping: A Journal of Research and Practice 5 (1) pp. 63-89, 2013.

S.D. Johnson-K.J. Bowers, *The Burglary as Clue to the Future The Beginnings of Prospective Hot-Spotting,* European Journal of Criminology, 1, 2004, pp. 237–55.

J. Ratcliffe, *Jerry’s top ten crime mapping tips v.2.1,* 2004.

M.D. Ward-K.S. Gleditsch, *Spatial regression models,* SAGE, 2008.

For more details on the reading list and the distinction between attending and non-attending students, students are invited to consult the syllabus that will be made available on Blackboard along with any supplementary materials.

***TEACHING METHOD***

Most classes will be held in the computer lab with theoretical lessons alternating with practical exercises. Some parts of the course may be held in English. During the module some data analysis software will be provided and used.

***ASSESSMENT METHOD AND CRITERIA***

*Attending* students will be assessed through a written paper in English using the techniques learned (max 30 points).

*Non-attending* students will be assessed through a written examination in English on all course topics (3 open questions – 90 minutes – max 30 points).

*Attending* students are those who have attended at least 80% of the lectures. The exam for attending students may only be taken in the first examination session following the end of lectures.

In both cases students will be evaluated on knowledge gained during the course as well as their ability to develop independent and logical reasoning applying the skills and techniques learned.

More details will be provided in class and in the syllabus

The final mark of the course will be the weighted average of the tests for all three modules, under the condition that the obtained mark is equal or above 18. The average is rounded up.

***NOTES AND PREREQUISITES***

Attendance is strongly recommended due to the practical nature of the course. Several exercises will be carried out in class with students. Furthermore, the course includes intensive use of Excel and introduction to the use of QGIS, programs that will also be used in module 3 of this course.

Updated programme, reading list, instructions and other documents will be published on the *Blackboard* page of the course. Blackboard will also be the tool for communicating changes to schedule, exam information and more.

All students (attending and non-attending, current and non-current) are invited to register for the course on *Blackboard* and to keep up to date (by kindly inserting their own e-mail address on *Blackboard* indicating clearly their name and surname).

Knowledge of Excel and a basic knowledge of QGIS are the pre-requisites of the course. For best understanding of the module, students are advised to attend module 2 of the same course.

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