# Laboratory on Criminological Research

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

The course aims to provide students with some methodological competences, IT skills and interpretive abilities to read and analyse contemporary phenomena, in particular related to labour market and work organizations. The objectives will be met through both the use of national and international official statistical sources, and the ability to correctly choose and apply certain quantitative and graphical analytical tools. The laboratory includes two modules, each of which will be assessed separately. The laboratory will be based on the use of computers.

*Knowledge:*

Students will know the main methods of quantitative social research for the analysis and interpretation of labour market trends and phenomena concerning work and work organizations, measured by secondary and primary sources. In addition, they will have the possibility to discover the functions of Excel and SPSS that can be used for the creation of statistical reports, the identification of statistic samples, the reading of inferential statistics measures, and the univariate, bivariate, multivariate analysis of raw data. They will know the main official national and international statistical sources concerning themes related to the work realm.

*Competences and skills:*

Students will be able to apply the theoretical and computer knowledge acquired to the analysis of some collective phenomena empirically investigated through sample or census surveys. They will be able to identify official statistical sources appropriate to the topic studied and correctly apply some quantitative and graphic analysis tools, with the support of Excel and SPSS.

*Autonomy of judgment*

Students will have acquired a theoretical and operational knowledge that will give them autonomy in collecting and processing information with which formulate projects and proposals appropriate to the different contexts of action. Autonomy of judgement will be developed through students’ active participation in the laboratory, but also through the activity assigned to prepare a final paper as required for the first part of the course.

*Learning ability*

Students will be able to use analysis tools and to apply the study methods developed to independently deepen and update their knowledge. Learning skills are assessed through individual exercises during workshop activities.

***COURSE CONTENT***

Part 1: *Data and methods for the reading of social phenomena (secondary sources)* (Prof. Danya Facchinetti)

1. *The knowledge and use of official statistical sources.*

* The local, national, and European scenario.

– Primary and secondary sources.

– Administrative sources and open data.

– Territorial indicators.

– Finding statistical data on the Internet.

1. *The analysis of data deriving from secondary sources using Excel*

Excel is a widespread computing software that can be very useful in statistical analysis. During the course, students will have the possibility to rediscover some of the techniques introduced during the Social Statistics course (year 1) and put them into practice thanks to the use of spreadsheets.

* Spreadsheets and data matrix
* The use of pivot tables for univariate and bivariate analysis.
* The graphic representation of univariate and bivariate statistical variables
* The identification of a statistical sample from a list.

– The calculation of point and interval estimations based on statistical samples.

– Statistical relationships: creation and interpretation through real data.

Part 2: *Focus on criminological research* (Prof. Barbara Vettori)

1. *Official statistical sources in criminology*
2. *The analysis of data deriving from primary sources using SPSS*

– Univariate analysis: alignment of students’ knowledge with procedures regarding the analysis of frequency distribution (representational charts and tables) and on the main measurements of centrality and dispersion;

– Univariate analysis of multiple-choice questions. Procedures, applications, reading and interpretation;

– Bivariate analysis: cross tabulation, simple linear regression, logistic regression. Procedures, applications, reading and interpretation;

– Multivariate analysis: multiple linear regression. Procedures, applications, reading and interpretation;

– Analysis of secondary sources with SPSS: historical series and territorial series

***READING LIST***

Part 2

B. Vettori, *Le statistiche sulla criminalità in ambito internazionale, europeo e nazionale. Fonti e tecniche di analisi con SPSS*, LED Edizioni Universitarie di Lettere Economia Diritto, Milan, 2010.

Learning materials available on Blackboard.

***TEACHING METHOD***

Lectures, also computer-aided, in the first and second semester. Practical classes involving case studies and experiments aimed at software use. Use of the Blackboard platform.

***ASSESSMENT METHOD AND CRITERIA***

The expected methods for assessing students’ knowledge and skills acquired are distinct for the first and second part of the course. For each part, the course assessment consists of a computer-based written exam. The overall exam is considered passed when the students successfully complete each of the two parts of the exam. Exams and mark registration take place on the same official exam date, when the lecturers responsible for the two parts of the course and the coordinator will be present.

Part 1 (Facchinetti)

Attending students will be subject to an *ongoing evaluation procedure*, covering the whole academic semester. In order to be considered as attending students, they will have to: a) be regularly enrolled on Blackboard, and b) attend class regularly. This procedure includes three practical activities, to be submitted during the course, awarding students with a maximum of 9 points. The remaining 22 points will be acquired at the end of the course through a final exam consisting in a selection of exercises similar to the ones carried out during the practical activities (11 points) and multiple-choice questions on the theory (11 points).

For non-attending students, the final exam will consist in practical exercises (16 points) and multiple-choice questions on the theory (15 points).

Assessment criteria: the use of Excel to process data; the choice of the most appropriate theoretical tools among the ones presented in class; the use of analytical rigour while looking for an answer, and the ability to use argumentation to explain the results obtained.

Part 2 (Vettori)

a) attending students will be given the opportunity to take an intermediate exam scheduled immediately after the end of classes and compatibly with the academic calendar. The intermediate exam represents an extra opportunity beyond the official exam dates. Students who wish to attend the intermediate exam need to meet the following criteria: a) being regularly enrolled in the course page on Blackboard, b) attending classes regularly and c) having taken the written exam on the first part of the course (even if not passed).

The intermediate exam consists of exercises to be solved using SPSS software (for data analysis and processing) and Word (to export and comment the SPSS outputs). The test can also include theoretical questions on data sources mentioned under point a). The evaluation will take into consideration the ability to use the most consistent theoretical tools amongst those studied, the ability to use SPSS commands to carry out analysis, the ability to comment coherently on the obtained results and knowledge of the statistical sources concerning the topics presented. The mark will be out of 30 (maximum score achievable: 30/30);

b) for non-attending students, the exam will be held on official exam dates. The exam consists of exercises to be solved using SPSS software (for data analysis and processing) and Word (where the SPSS outputs are exported and commented). The evaluation will take into consideration students’ ability to use the most consistent theoretical tools among those proposed, the ability to use the SPSS commands to carry out analysis, the ability to comment coherently on the results obtained. The mark will be out of 30 (maximum achievable score: 30/30).

The final grade is calculated as the average of the grades of the exams on the first and second part of the course.

***NOTES AND PREREQUISITES***

The following basic computer skills are required: file management (working on files and folders; file compression: renaming; copying and pasting); text writing; use of electronic worksheets (inserting data in cells, operations within cells, operations on worksheets, formatting numbers and texts). Students who are not familiar with computer use are advised to attend online courses on the fundamentals of Excel.

It is also assumed that students master contents of the courses Social Statistics and Social Quantitative Research Laboratory.

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 lecturers’ webpages at http://docenti.unicatt.it/web/searchByName.do?language=ENG, or on the Faculty news