

## I YEAR

### **Mathematics for Social Sciences**

This course is designed to review students' knowledge of elementary mathematics and to expose them to some of the mathematical concepts and techniques that are required to study mathematical models in the social sciences. Upon completing this course, students should be able to identify, sketch and analyze functions; to solve several types of equations and systems of linear and quadratic inequalities; to know the basic theory of matrix algebra; to explain the concept of a derivative and to differentiate single variable functions using different rules of differentiation.

### **Statistics & Programming**

By the end of the course students have acquired knowledge of the main statistical techniques for exploratory data analysis and the fundamental concepts of probability and inference from random samples. Moreover, they have developed skills to formalize and to solve the basic statistics problems using R.

### **Accounting and Financial Statements**

The course aims to introduce students to accounting and financial statements and prepare them to deal effectively with this subject in the international arena. To that end, we will focus on both financial and management accounting theory and practice. At the end of the course, the students will be able to understand double-entry bookkeeping rules, prepare and read financial statements, and use management accounting techniques for decision making in private, public and non-profit organizations.

### **Principles of Private Law**

The course aims at providing the student with a general knowledge of basic principles and concepts of Italian property law, contract law and tort law. At the end of the course the student is expected: - to become familiar with the legal notions of property rights, contractual rights and obligations, the applicable remedies in case of violation of property and contractual rights, as well as the nature and legal consequences of human and entrepreneurial activities. - to understand the importance of protecting and enforcing legal rights and obligations for a fair, cooperative and efficient functioning of our societies.

[Public Law and Private Law will be taught in close integration]

### **Principles of Public Law**

The Course aims to provide a general knowledge of the fundamental legal standards related to the contemporary Public Law under the national and European legal frameworks. Consequently, Students are expected to get insides and skills on the following: Legal Systems. Common and Civil Law. National and Supranational Sources of Law. Interpreting Legal Standards. National and Supranational Institutions. State's Powers and Bodies. Law-making and Rule-making. Soft Law and Intangible Standards. Public Power. Government, Agencies and Authorities (NRAs, etc.). Adjudication. Orders and Sanctions. Judiciary and Remedies. Case-Law Methodology will drive the discussion over the Course's subjects and issues.

[Public Law and Private Law will be taught in close integration]

### **Sociology and Social research**

The course introduces students to key sociological concepts and topics and encourages the development of skills pertaining to the understanding and investigation of social phenomena from a sociological perspective. Students completing the course will be familiar with the main epistemological orientations in contemporary social science debates; analyze key features of social structure, social inequality, social change and comparative research; critically assess different sociological approaches; make decisions involving the design and execution of social research projects.

### **Microeconomics**

The course introduces students to the fundamental topics of microeconomics: theory of consumption, theory of production, competitive markets, monopoly, imperfect competition, and the role of the government. The goal is to acquire a working knowledge of how consumers, producers, and the government interact in a market economy. At the end of the course, students will be able to analyze the economic choices of individual actors and their desirability at the individual and collective level.

## **II YEAR**

### **Second Language**

The student knows the fundamental elements (terms, ideas and methods) for the analysis of the structure, of the functions and of the textual and discursive organization of the second language (French, German or Spanish) - he/she is able to understand, analyze and provide particularly oral conversations (but also written texts) belonging to the relevant textual kinds, also in multimedial ambits - he/she is capable to spontaneously express him/herself in a very flowing and precise way also in complex communicative situations.

### **European and international law (I.C.)**

European Union Law – IUS/14

Learning outcomes. At the end of the course unit, students:

have developed the ability to analyse the main implications of the EU institutional structure and to determine the overall effects of the law into the municipal legal orders of the Member States;  
are capable to illustrate the main trends of the interplay between the Union and its Member States (both internally and on the international scene).

Foundations of international law – IUS/13

Learning outcomes. At the end of the course unit, students:

possess a basic knowledge about the structure of the international legal order, with an emphasis on the interactions between sources and the relationships involving the subjects of the international community;  
are capable to correctly and independently assess, the interaction between sources belonging to different cooperation areas at the international level and can interpret multiple primary sources.

### **Principles of Management**

The course aims to introduce students to the theory and practice of management. At the end of the course students can understand the main activities and concepts of operations and supply chain management. This area is taken as a metaphor and laboratory to study concepts, such as efficiency and effectiveness, that are then useful for all courses in management. At the end of the course students can control operating processes and manage activities of market oriented companies by defining the strategic framework in which a company operates.

### **Macroeconomics**

The course introduces students to how the national and global economies work at the aggregate level, and how production, employment, prices and interest rates are determined. At the end of the course students will acquire the theoretical foundations to analyze the business cycle (why economic activity fluctuates), long run economic growth (why some countries are rich and other poor, why some countries are growing and other stagnating), financial crisis and recessions as well as an understanding of how fiscal, monetary, and economic policy in general affect economic activity.

## **International History of Globalization**

The course provides students with the conceptual framework for understanding major global transformations over the long term, in the belief that historical perspective offers important insights into present issues.

At the end of the course, students will be able to understand and evaluate representative political, philosophical, and economic concepts that help illuminate the major characteristics of specific historical periods and how political, social, and economic structures have changed through time from a global perspective. Students will also be able to analyze key concepts such as the formation of the modern state; the emergence of capitalism; the roots and historical development of nationalism; the rise and crisis of the welfare state; international economic relations, protectionism and free trade; the politics of power in a multipolar and a bipolar world; the relationship between individuals and political and economic institutions.

## **Political Behavior and Institutions**

The course introduces students to the key concepts and themes of political science. In order to do so, the course will focus on what “politics” is, the empirical study of politics, the development and functioning of political institutions, the comparative analysis of political regimes with a focus on how democracies emerge and function.

At the end of the course, students will be able to:

- analyze the key features of different political institutions.
- connect different approaches and concepts to analyze interpret contemporary political phenomena.
- compare and contrast different paths of institutional development

## **Econometrics**

The course provides an elementary but comprehensive introduction to the practice of econometrics, useful to correctly interpret estimates and develop simple empirical projects. By the end of the course the student will have adequate knowledge of linear regression models for the analysis of cross-sectional data (and a preliminary understanding of models for the analysis of panel data) and he/she will be able to understand under what conditions linear regression model estimates have a causal interpretation.

## **Programming Lab 1**

Students develop transversal skills with a focus on the development of skills complementary to the quantitative methods' courses. In particular, students acquire skills in data analysis and in the use of dedicated software and programming languages such as R or Python, as well as skills in data visualization.

## **III YEAR**

## **International Politics**

The course aims to provide students with knowledge of the major theories and approaches to the analysis of international relations. In order to do so, it will focus on the structure of the international system, the dynamics of cooperation and conflict in the international arena, and the evolution of war in international politics. At the end of the course, students will be able to distinguish the key factors underpinning cooperation and conflict in world politics and to use the major theories in international relations to understand contemporary international political phenomena.

## **Political Economy**

The goal of this course is to discuss current topics in political economics. Thus, the course will address questions such as: what are the political and institutional determinants of fiscal policy and macroeconomic policy in modern democracies? Which features of political institutions are more likely to foster economic

development?

At the end of the class student has knowledge on using the concepts and tools of the new political economy to analyze current topics in this field. Student is able to analyze issues such as: - the interaction between politics and economics in shaping macroeconomic policies in modern democracies; - the role of political institutions in the process of economic growth and development. The course is meant to train students to understand how policy decisions are made, and how they can be improved.

### **Economic Development, Inequality and Growth**

By the end of the course students have achieved the following knowledge: (a) acquired an enhanced empirical knowledge of economic conditions in low and middle income economies; (b) acquired an understanding of the functioning of economic and political institutions in developing countries; (c) consolidated the understanding of those elements of basic economic theory which we apply to the problems of development; (d) acquired an understanding of the main theoretical results and empirical methods that are used by the profession to study developing countries.

### **Public Economics**

This course is an introduction to the theory and practice of public economics in terms of public goods, externalities, taxation and public spending. At the end of the course, students will be able to understand the functioning of the most important economic instruments in the hands of the government.

### **Big Data Applications**

At the end of the course, students will be able to apply the main tools used in (supervised and unsupervised) machine learning to issues related to the field of economics, political science, business economics and law.

### **Administrative Law and Market Regulation**

The course aims to provide students with a basic knowledge of key concepts of administrative law (public entity/body, administrative act/action, public contracts) and market regulation tools, taking into account the switch from a pure national model of market regulation to a mixed model of supranational public regulation.

At the end of the course students will be able to understand how market regulation affects the public/private relations and how public and private law instruments are used by to achieve policy goals.

### **Applied Political Sociology**

The course introduces the student to the sociological-empirical analysis of societal phenomena, such as integration, acceleration, polarization, fragmentation and social action, such as conflict, protest, critique, social mobilization, and claims-making. The course introduces the students to a range of methodological approaches to the study of society/social actors in interaction with politics, law, and the economy. The course enhances the student's capacity and skills to analyze society, social actors, and social problems by using sociological and interdisciplinary instruments.

### **Analysis of contemporary society**

The course introduces the student to the sociological-empirical analysis of societal phenomena, such as integration, acceleration, polarization, fragmentation and social action, such as conflict, protest, critique, social mobilization, and claims-making. The course introduces the students to a range of methodological approaches to the study of society/social actors in interaction with politics, law, and the economy. The course enhances the student's capacity and skills to analyze society, social actors, and social problems by using sociological and interdisciplinary instruments.

## **Public Management**

In the last decades, the public sector has been involved in a great process of change that has brought to the development of a new research paradigm, the New Public Management. The course will focus on theoretical, operative and critical aspects of the public sector transformation considering the different strands originated by the New Public Management such as New Public Financial Management, New Public Governance, Citizen Engagement and Public Value. At the end of the course, the students should be able to frame, understand and discuss the changes that have recently involved the public sector at national and international level in the greater transformation process of the public administration as a whole.

## **Big Data in Social Sciences**

The course provides a bridge between statistics, computer science and the social sciences. By the end of the course students gain a basic knowledge of the main multivariate statistical methods used in the field of Big Data and the knowledge to carry them out for addressing critical research questions in the social science field. Real-world problem concerning social phenomena will be presented and analyzed through updated statistical methods and tools using R.

## **Data Science for Policy Analysis**

The aim of the course is to build capacity in using data to inform evidence-based decision-making. The course will provide students with a broad overview of tools and methods for data analysis and applied empirical research, with a particular focus on the estimation of causal effect of public policies. Students will analyze realworld datasets and will be guided through case studies from a variety of policy domains. By the end of the course students will be able to perform a basic – yet rigorous – analysis of data to better understand policy choices. They will gain enough data science literacy to interpret and judge the quality of existing empirical research and to communicate the results to decision makers and the public.

## **Programming Lab 2**

Students develop transversal skills with a focus on the development of skills complementary to the quantitative methods' courses. In particular, students acquire skills in data analysis and in the use of dedicated software and programming languages such as R or Python, as well as skills in data visualization.

## **Final examination**

The final dissertation and its defence are the result of the research and the preparation activity carried out by the student. Through the thesis preparation the student acquires critical skills to present his/her final results, summarises the specialized contents of the branch of knowledge and clearly and efficiently communicates the original contributions reached.