UE1 FUNDAMENTAL

ECTS
30 crédits

Composante
École d'économie de la Sorbonne (EES)

Période de l'année
Automne

Liste des enseignements

ObligatoireMatière18.0Summary: This course focuses on the traditional models that are currently adopted to specify the fair prices of financial assets under no arbitrage condition.The range of assets is from the single stock or bond to complex derivatives. Different frameworks are examined depending on the characterisation of time and/or uncertainty. The question of pricing crypto-assets is also addressed. Professor : Catherine Bruneau (Professor of Economics - University Paris 1 Panthéon-Sorbonne)Student assessment: Final exam (50%) + numerical implementation related to one of the topics of the course (50%)Matière18.0Summary: This course is devoted to times series:- First, taken separately, with the treatment stationary dynamics (ARMA models), with potential heteroskedasticity (ARCH effects) and non-linearity (STR Models).- Second, in a multivariate approach, with standard linear models (VAR models and VECM ones in case of cointegration, possibly included in dynamic networks). Principles of Difference-in Difference (causal) analyses are recalled.Professor : Catherine Bruneau (Professor of Economics - University Paris 1 Panthéon-Sorbonne)Student assessment: Final exam (50%) + numerical implementation related to one of the topics of the course (50%)Matière18.0Summary: To understand the value-added of the current wave of the financial innovation, it is important to go back to first principles to reflect about what needs financial system has to fulfill in the economy and why financial innovation arises (Lecture 1). This course will explore financial innovation through two broad questions: What is being financed? In the knowledge economy, the financing objectives have shifted from tangible to intangible capital in the last two decades (Lecture 2). Additional challenges arise from the need to finance the transition to low-carbon economy (Lecture 5). How is it being financed? Technology has not only allowed incumbent banks to close physical branches, but it has also led to the emergence of new business models: neobanks, loan-based and equity-based crowdfunding platforms, initial coin offerings (Lecture 3) as well as the entry of Big Tech firms into financial services market (Lecture 4). To analyze these developments, students will be invited to use concepts from the theories of financial intermediation (e.g. informational asymmetry, bank run, transformation of maturity and risk), microeconomics (market power, entry barriers) and digital economy (e.g. network effects, economies of scale, personal data). To develop critical thinking, students will be encouraged to follow the state-of-of-the art academic research that helps to understand the role of technology in the financial intermediation.Professor: Olena Havrylchyk (Professor of Economics - University Paris 1 Panthéon-Sorbonne)Student assessment: Presentation + FinTech Essay Matière18.0Summary: This research seminar explores financial market microstructure with a focus on the impact of Information and Communication Technologies. Its main objectives: To describe in detail the institutional and operational framework of the financial markets. To understand the new trends in financial markets (automation, high frequency trading). To give an overview of the academic literature in microstructure. To discuss the concept of financial market efficiency. To study the dynamics of stock prices. To examine the various investors strategies. To explain market manipulation, insider trading and frauds. To introduce the basic elements of behavioural finance and experimental economics. Professor: Gunther Capelle-Blancard (Professor of Economics - University Paris 1 Panthéon-Sorbonne)Student assessment: Writing a research paper (a survey)Matière6.036.0Matière3.018.0Matière3.018.0Matière3.018.0Matière18.0