

Faculté des sciences économiques

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Asset pricing (5AF2003)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en finance, orientation analyse financière (avant 2013)	Cours: 4 ph	cont. continu	6
Master en statistique	Cours: 4 ph	cont. continu	6

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

Semestre Automne

Equipe enseignante:

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Objectifs:

The objective of the course is to solve the consumption/saving problem in discrete time. First, we examine consumption and saving under certainty (two-period). Second, the basic model is re-examined under uncertainty and generalized to a multi-period framework.

Contenu:

We will first discuss the optimal consumption and investment decisions in a one period model under uncertainty and risk aversion. This will lead us to the construction of a static equilibrium model of financial assets valuation: the Capital Asset Pricing Model (CAPM). We will then move on to arbitrage based valuation by introducing the concept of Arrow-Debreu securities and equivalent martingale measures. We will derive a general arbitrage based valuation methodology: the Arbitrage Pricing Theory (APT). Finally we will derive a dynamic equilibrium model: the Consumption-Cased Asset Pricing Model (C-CAPM). We will emphasize the link between the different approaches discussed in class and show that there are, in fact, different specifications of the same equation, namely a characterization of the stochastic discount factor.

Forme de l'évaluation:

Continuous assessment: Mid-term exam 40%, final exam 60%. Re-take exam (September): 2-hour written exam 100%.

Documentation:

Danthine J.P. and R. Donaldson, 2005, Intermediate Financial Theory, 2nd edition, Elsevier. Elton E., M. Gruber, S. Brown and W. Goetzmann, 2003, Modern Portfolio Theory and Investment Analysis, John Wiley & Sons. CFA textbooks (2011).

Pré-requis:

None.

Forme de l'enseignement:

Lectures: 4 hours per week.