



UNIVERSIDADE FEDERAL DE SÃO CARLOS

Centro de Ciências em Gestão e Tecnologia

Programa de Pós-Graduação em Administração

Rodovia João Leme dos Santos (SP 264), Km 110 - Bairro Itinga
Sorocaba – SP, CEP 18052-780. Telefone: (15) 3229-7456



Program:	Post-Graduate Program in Administration		
Course:	Derivatives	Code:	ADM-203
Level:	Academic Master	Type:	Optional
Credits:	8	Workload:	120 hs

Purpose:

This course will provide an overview of the concepts needed to use futures and options markets as risk management tools, focusing on the commodity and financial markets. Part of the course will be based on lectures covering topics such as the relationship between a commodity's cash and futures prices, hedging and speculative strategies involving futures and options contracts, and spreads. Traditional option pricing models will be presented, such as the binomial, the Black-Scholes-Merton and the Black models. This course will also cover the discussion of selected papers in the literature of futures and options markets. Paper discussion will also include the application of econometric time series models and their use in the related field. Students are required to develop a research project that includes any of the discussed topics during the course.

Course Program:

- Forward and futures contracts; (theory)
- Trading futures contracts; (theory and application)
- Basis and spreads; (theory and application)
- Models of futures prices; (theory)
- Optimal hedging; (theory and application)
- Options; (theory)
- Advanced hedging strategies; (theory and applications)
- Option pricing models; (theory and application)
- Paper discussion and applications. (theory and application)

Bibliography:

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CHEN, S.; LEE C.; SHRESTHA, K. Futures hedge ratios: a review. **The Quarterly Review of Economics and Finance**, Urbana-Champaign, v.43, n. 3, p. 433-465, 2003.

COX, J. C.; ROSS S. A. The valuation of options for alternative stochastic processes. **Journal of Financial Economics**, p.145-166, Jan. 1976.

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