

Trading & Arbitrage Strategies for the Dealing Room

MSc in Finance and Banking

Athens University of Economics & Business

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Aims and objectives:

Dealing room operations focus, mainly, on trading financial securities and executing financial transactions, and are directly dictated from risk, liquidity and cash management constraints. The aim of this course is to make the student familiar with the functions, operations and trading strategies in the modern dealing room. It attempts to develop an operational knowledge in trading financial securities with a focus on risk management, cash management (working capital management) and return enhancement. This course begins with an introduction to dealing room technology, market making, technical analysis, it proceeds to cover a repertoire of trading and arbitrage strategies for equities and derivatives, and finally it presents best financial techniques regarding cash management.

After the completion of the course the students will have a full understanding of the activities of a bank's or a financial institution's treasury department, and an insight of how treasury can support business strategy. They will acquire fundamental knowledge and skills on trading mechanisms (how security trading is conducted, how security traders can minimize their cost of trading, and of how market makers can optimally set prices and execute orders), theoretical and empirical issues of different financial instruments, their valuation methodology, and their institutional uses in risk and cash management. They will also gain first-hand experience in trading simulated securities and making a market for simulated securities at the program's Dealing Room consisting from 12 fully functional Thomson Reuters Eikon Terminals.

Course outline and reading list

The course is organised in six four hour sessions as follows:

1. Dealing Room's Functionality & Technology.

(Major operations and function of a dealing room, Introduction to Thomson Reuters Eikon)

2. Trading And Market Making

(Execution of Investment Decisions; Order Types; The role of Brokers, Dealers and Market Makers; Execution Costs).

3. Futures Trading & Hedging With Futures

(Trading Futures; Portfolio Risk Management; Optimal Hedge Ratio; Basis Risk)

4. Buying & Selling Volatility

(Trading Options; Buying and Selling Volatility, Delta and Gamma Trading; Hedging Strategies using Options)

5. Arbitrage Strategies

(FX Arbitrage; Arbitrage Strategies using Futures; Arbitrage Strategies Using Options: Put-Call Parity Arbitrage, Calendar Arbitrage, Strike Spread Arbitrage)

6. Working Capital Management - Cash Management

(Managing the Cash Position, Forecasting Short Cash Flow, Short-Term Investment Strategies).

Each session consists of a 2-hours lecture, followed by a 2-hours practical session in the dealing room.

Text Books:

1. Trading and Arbitrage Strategies (Lectures 1 to 5)

- Sheldon Natenberg (2014). "Option Volatility and Pricing: Advanced Trading Strategies and Techniques", 2nd Edition, McGraw-Hill Education.
- Anatoly B. Schmidt (2011). "Financial Markets and Trading: An Introduction to Market Microstructure and Trading Strategies", Wiley
- John L. Maginn, Donald L. Tuttle, Dennis W. McLeavey, Jerald E. Pinto. (2007). "Managing Investment Portfolios: A Dynamic Process" 3rd Edition, Wiley.
- Larry Harris, (2002). "Trading and Exchanges: Market Microstructure for Practitioners", Oxford University Press.

2. Risk Management Applications of Derivatives (Lectures 3 and 4)

- John C. Hull (2015). "Risk Management and Financial Institutions", 4th Edition, Wiley.
- Hull, J. (2005), Options, Futures and Other Derivatives, 9th Edition, Wiley.
- Elton E, Gruber M. and Brown S., (2014) "Modern Portfolio Theory and Investment Analysis", 9th Edition, Wiley.
- Connolly, K. (2001), "Buying and Selling Volatility", Wiley.

3. Working Capital Management (Lecture 6)

- Jonathan Berkand and Peter DeMarzo (2013). "Corporate Finance", 3rd Edition, Pearson.
- John Zietlow and Matthew Hill (2013). "Short-Term Financial Management", 4th Edition, Cognella Academic Publishing.
- Michelle R. Clayman, Martin S. Fridson and George H. Troughton (2012). "Corporate Finance Workbook: A Practical Approach", 2nd Edition, John Wiley & Sons.

4. Technical Analysis

- John J. Murphy, (1999). "Technical Analysis of the Financial Markets: A Comprehensive Guide to Trading Methods and Applications", New York Institute of Finance.
- Robert D. Edwards, John Magee and W.H.C. Bassetti (2012). "Technical Analysis of Stock Trends", 10th Edition, CRC Press.