

**Institutional Finance:
Institutional Finance
Academic Year 2016/17, Fall 2016**

Instructor: Paolo Colla
email: paolo.colla@unibocconi.it
Office: TBA
Office hours: Tue, 6.00pm

Room: Staples (building Quelhas, floor 2)
Weeks: November 3-9 & November 21-25
Times: 3pm to 6pm

COURSE DESCRIPTION

The course presents an introduction to financial intermediation and the organization of trading and aims at investigating the following aspects: 1) what are banks and what do they do? 2) what are the motives for trading and how is the trading process organized? 3) how do traders (and protocols) affect market quality? The analysis of these issues will be conducted at three different levels: institutional, theoretical, and empirical. The course takes the move from the institutional level, and describes the banking and trading industry with special focus on: role of banks and stability of the banking system, market structures (trading sessions and execution systems), order properties (market, limit and stop orders), and market participants (retail investors, brokers, dealers, arbitrageurs and gamblers). Given the complexity of real-world trading environments, we'll investigate the above mentioned aspects by means of theoretical models that simplify the analysis along several dimensions. We'll start introducing the traditional banking model which highlights the role financial intermediaries have in insuring borrowers. We will then move to the trading industry and firstly analyse liquidity provision as a trading motive within both dealer markets (inventory models) and the limit order book. Then, we'll introduce asymmetric information in a standard finance model, and study its impact on market quality both in (competitive and strategic) batch and dealer markets. After developing each model, we'll review the methodology to test its predictions and discuss the empirical evidence. Further topics are discussed in the last unit of the course.

RECOMMENDED TEXTBOOKS

There is no ideal textbook for this course. We will make use of material from the following:

[dJR] F. de Jong and B. Rindi, *The Microstructure of Financial Markets*, Cambridge University Press, 2009

[FR] X. Freixas and J.-C. Rochet, *Microeconomics of Banking*, MIT Press, 2008

[DKO] H. Degryse, M. Kim and S. Ongena, *Microeconometrics of banking*, Oxford University Press, 2009

[Has] J. Hasbrouck, *Empirical Market Microstructure*, Oxford University Press, 2007

[FR] and [DKO] will be used for the financial intermediation unit, while the other units will be based on material from [dJR] and [Has]. Each of these books has a different angle on financial intermediation and market microstructure: [FR] contains rigorous treatment of theoretical banking models, while [DKO] follows the same structure of [FR] concentrating on the empirical evidence; [dJR] provides in-depth coverage of theoretical market microstructure models while [Has] focuses on the empirical analysis of microstructure data. You are not required to buy the above textbooks, and, if anything, the decision about which one(s) to buy depends on your personal tastes and preferences.

COURSE MATERIAL

Additional course material (slides, and further readings) will be made available via our shared Dropbox folder ("ISEG_2016").

GRADING

The final grade for this course is calculated according to the following scheme:

Class participation	10%
Midterm exam	40%
Final exam	50%

Active class participation –rather than simply attending classes- is what gets rewarded.

The midterm exam will be held in class during the second week (November 21-25), while the final will take place according to the ISEG calendar.

Both exams are closed book, and contain a mix of multiple choice and open-ended questions. You will be allowed to use a silent battery operated calculator during the exams, while laptops are not allowed. All appeals of grades should be addressed within one week. I will be glad to re-grade any exam. However, you must provide a statement in writing as to where and why there is a problem. Verbal appeals of grades will not be accepted. Importantly, the entire exam will be re-graded. As a result, the re-graded score may increase, remain the same, or decrease. Exams written with pencil are not valid.

DETAILED COURSE STRUCTURE

Unit	Session	Topic	Textbook References
	1	Traditional and institutional finance	
Financial Intermediation	2	Maturity transformation and interest rate risk	[FR] 8.3.1-8.3.2
	3	Liquidity risk and bank runs -asymmetric information on the liability-side	[FR] 2.1-2.2
	4	Credit risk and monitoring -asymmetric information on the asset-side	[DKO] 2.1-2.3.1
	5	Financial intermediation during the 2007-09 financial crisis	[DKO] 8.1-8.2
Trading/1: Setting up the Scene	6	Outlook on the trading industry/1: Trading mechanisms	
	7	Outlook on the trading industry/2: Order submission and execution	[dJR] 1.3,6.4.2
	8	A first look at bid, ask and transaction prices	[dJR] 6.2.1-6.2.2 [Has] 3
Trading/2: Liquidity Provision	9	Dealers and inventory/1: Theory	[dJR] 5.1
	10	Dealers and inventory/2: Evidence	[dJR] 6.5.1-6.5.2, 6.5.4 [Has] 11.3
	11	Limit order book/1: Theory	[dJR] 8.2.1 [Has] 12.1,12.2.1
	12	Limit order book/2: Evidence	[Has] 12.3
Trading/3: Adverse Selection	13	Asymmetric information and market efficiency	[dJR] 2.2.1
	14	Dealers and asymmetric information: Theory	[dJR] 4.1 [Has] 5.1
	15	Dealers and asymmetric information: Evidence	[dJR] 6.3.1,6.4 [Has] 6.1-6.2
Further Topics	16	Strategic trading and price impact	[dJR] 3.1,3.2.1,6.3.2 [Has] 7.1-7.2, 8.1-8.5
	17	Algorithmic trading	
	18	Asymmetric information and performance evaluation	[dJR] 2.3.1-2.3.2