



## Course and Examination Fact Sheet: Spring Semester 2021

### 8,166: Market Microstructure

ECTS credits: 4

#### Overview examination/s

(binding regulations see below)

Decentral - Written examination (100%, 90 mins.)

Examination time: term time

#### Attached courses

Timetable -- Language -- Lecturer

[8,166,1.00 Market Microstructure](#) -- Englisch -- [Rinaldo Angelo](#)

#### Course information

##### Course prerequisites

Students who will successfully complete this course will gain a strong background to understand trading mechanisms used by market participants to trade financial securities including recent trends such as algorithmic (high-frequency) trading and how new regulations (e.g. Basel III) or policies (e.g. Quantitative Easing programs) have changed trading infrastructures and affect asset prices. The course Market Microstructure relies on the compulsory subjects of the MBF program.

##### Learning objectives

- Understand the price formation of financial assets.
- Learn how market design, technology, and institutional issues such as regulation and policy can affect asset prices and market participants' behaviors.
- Get familiar with the main important academic papers and recent research in market microstructure.

##### Course content

This course introduces Market Microstructure, which is the analysis of asset price determination and trading activities in financial markets. We extend the concept of an efficient market by introducing realistic "frictions" that explain why the market price of an asset diverges from its fundamental value. These frictions include trading costs, inventory risk, asymmetric information, market power, funding constraints, and strategic behaviours of market participants. We will discuss these mechanisms with a close connection to the original academic papers.

Students who will successfully complete this course will gain a strong background to understand trading mechanisms used for financial securities and the actual behavior of market participants including the recent trends such as algorithmic (high-frequency) trading. We will also discuss how new regulations such as Basel III have changed market infrastructures and the effects of Unconventional Monetary Policies (e.g. Quantitative Easing) on financial markets.

Andréa M. Maechler (Member of the Governing Board of the Swiss National Bank) should give the guest lecture about some recent advances in market infrastructure and central bank digital currencies.

##### Course structure

Introduction

Order Handling and Inventory Costs

Asymmetric Information



Liquidity

Empirical Market Microstructure

High-frequency Trading and Intraday Data, including an applied session using Trades & Quotes Data (TAQ) on transactions and orders of U.S. stocks.

Market Microstructure and Asset Pricing

Market Design, including a guest lecture on recent advances in market infrastructures.

## Course literature

Suggested readings: Foucault, T., M. Pagano, and A. Röell (2013): Market Liquidity: Theory, Evidence, and Policy. Oxford University Press.

## Additional course information

Given the current pandemic crisis and in case university regulations do not permit for on-campus examinations and teaching, all the lectures and the final written examination will be conducted online.

## Examination information

### Examination sub part/s

#### 1. Examination sub part (1/1)

##### Examination time and form

Decentral - Written examination (100%, 90 mins.)

Examination time: term time

##### Remark

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##### Examination-aid rule

Extended Closed Book

The use of aids is limited; any additional aids permitted are exhaustively listed under "Supplementary aids". Basically, the following is applicable:

- At such examinations, all the pocket calculators of the Texas Instruments TI-30 series and mono- or bilingual dictionaries (no subject-specific dictionaries) without hand-written notes are admissible. Any other pocket calculator models and any electronic dictionaries are inadmissible.
- In addition, any type of communication, as well as any electronic devices that can be programmed and are capable of communication such as notebooks, tablets, mobile telephones and others, are inadmissible.
- Students are themselves responsible for the procurement of examination aids.

##### Supplementary aids

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##### Examination languages

Question language: English

Answer language: English

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## Examination content

The exam covers the slides and everything discussed in class including the guest lecture.

## Examination relevant literature



The slides and papers used during the lectures.

## Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW21) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 12 are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 04 (Thursday, 28 January 2021);
- Examination information (regulations on aids, examination contents, examination literature) for decentralised examinations: in CW 12 (Monday, 22 March 2021);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 12 (Monday, 22 March 2021);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before the end of the registration period in CW 14 (Thursday, 8 April 2021).