Course and Examination Fact Sheet: Autumn Semester 2019

9,164: Fixed Income Instruments

ECTS credits: 2

Overview examination/s
(binding regulations see below)
Decentral - Written examination (100%, 60 mins.)

Attached courses
Timetable -- Language -- Lecturer
9,164,1.00 Fixed Income Instruments -- Englisch -- Süss Stephan

Course information

Course prerequisites
‘Fixed Income Instruments’ is an advanced derivatives class. The lectures ‘Financial Markets’, ‘Quantitative Methods’, and ‘Derivatives’ are recommended. We expect students to be familiar with e.g. Black-Scholes and binomial option pricing.

Course content
The course provides an in-depth introduction to interest rate derivatives and the corresponding pricing models, such as
- Black’s model
- Equilibrium models (Vasicek model, Cox/Ingersoll/Ross model)
- No-arbitrage models
- Hull/White model
- LIBOR Market Model

Students will be up-to-date on models from theoretical, as well as practitioner/trading perspectives.

Course structure

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Subject</th>
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| 1       | Overview on interest rate derivatives and term structure models
|         | Black’s model
|         | Equilibrium models (Vasicek model, Cox/Ingersoll/Ross model) |
| 2       | No-arbitrage models (Hull and White model)
|         | LIBOR Market Model
|         | Applications of the LIBOR Market Model |
| tbd     | Exam |

Course literature

- Slides on StudyNet
  - "Interest rate derivatives: The standard market models"
  - "Convexity, timing, and quanto adjustments”
  - "Interest rate derivatives: Models of the short rate"
  - "Interest rate derivatives: HJM and LMM"
- Additional material declared during class
Additional course information
For additional questions, please contact

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Examination information

Examination sub part/s

1. Examination sub part (1/1)

Examination time and form
Decentral - Written examination (100%, 60 mins.)

Remark
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Examination-aid rule
Open Book
Students are free to choose aids but will have to comply with the following restrictions:

- At such examinations, all the pocket calculators of the Texas Instruments Ti-30 series are admissible. Any other pocket calculator models 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 electronic dictionaries, notebooks, tablets, PDAs, 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

Examination content
The exam is based on the presentations in class, including the compulsory readings.

Examination relevant literature
The covered literature consists of the compulsory reading material.
Please note

Please note that this fact sheet alone is binding and has priority over any other information such as StudyNet (Canvas), personal databases or faculty members’ websites and information provided in their lectures, etc.

Any possible references and links within the fact sheet to information provided by third parties are merely supplementary and informative in nature and are outside the University of St.Gallen’s scope of responsibility and guarantee.

Documents and materials that have been submitted no later than the end of term time (CW51) are relevant to central examinations.

Binding nature of the fact sheet:

- Information about courses and examination time (central/decentral) and examination type starting from the beginning of the bidding on 22 August 2019
- Information about examinations (examination aid regulations, examination content, examination-relevant literature) for decentral examinations after the 4th semester week on 14 October 2019
- Information about examinations (examination aid regulations, examination content, examination-relevant literature) for central examinations as from the starting date for examination registration on 4 November 2019

Please consult the fact sheet again after these deadlines have expired.