Course and Examination Fact Sheet: Spring Semester 2020

10,360: Quantitative Behavioural Finance with Applications

ECTS credits: 4

Overview examination/s
(binding regulations see below)
Decentral - Oral examination (individual) (50%)
Decentral - examination paper written at home (individual) (50%)

Attached courses

Course information

Course prerequisites
The topics treated in the master courses in "Mathematics" and "Advanced Mathematics".

Learning objectives
This class has two learning objectives:
(1) Students understand and explain a selection of behavioural models built to address problems in finance like portfolio selection and asset pricing. The explanation should also confront behavioral approaches and classical approaches and clarify the main innovations introduced by the former compared to the latter.
(2) Students achieve a solid understanding of innovative mathematical techniques needed to solve the behavioral models.

Course content
The course presents behavioral models that incorporate empirical and experimental evidence showing that investors' behavior systematically deviates from the principles of economic rationality. We then study how these models can be applied to portfolio selection and asset pricing in order to derive new explanations for empirical facts that contradict the predictions of classical models in finance.

Course structure

There are six 4-hour sessions that will present behavioral models for investors' behavior as well as their application to asset pricing and portfolio selection. The students will be requested to critically assess a research paper in behavioral finance as part of their evaluation.

The content of the course is as follows:
1. Empirical and experimental evidence on investors' behavior.
2. Behavioral models for individual decision making
3. Behavioral portfolio selection
4. Behavioral asset pricing

Course literature

Main reference:
Additional references:


Additional course information

Students who plan to take this course as an optional course and without an examination should not register via the bidding system. They should register directly with the lecturer.

Students who plan to take this course as a regular course or as an optional course with an examination should register via the bidding system. Enrolment in a course is binding: students have to attend the course and take the exam. The credits will be shown on the scorecard.

Examination information

1. Examination sub part (1/2)

   Examination time and form
   Decentral - Oral examination (individual) (50%)

   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, PDAs, mobile telephones and others, are inadmissible.
   • Students are themselves responsible for the procurement of examination aids.

   Supplementary aids
   No supplementary aids.

   Examination languages
   Question language: English
   Answer language: English

2. Examination sub part (2/2)
Examination time and form
Decentral - examination paper written at home (individual) (50%)

Remark
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Examination-aid rule

Term papers

- Term papers must be written without anyone else's help and in accordance with the known quotation standards, and they must contain a declaration of authorship.
- The documentation of sources (quotations, bibliography) has to be done throughout and consistently in accordance with the APA or MLA standards. The indications of the sources of information taken over verbatim or in paraphrase (quotations) must be integrated into the text in accordance with the precepts of the applicable quotation standard, while informative and bibliographical notes must be added as footnotes (recommendations and standards can be found, for example, in METZGER, C. (2017), Lern- und Arbeitsstrategien (12th ed., Cornelsen Schweiz).
- For any work written at the HSG, the indication of the page numbers both according to the MLA and the APA standard is never optional.
- Where there are no page numbers in sources, precise references must be provided in a different way: titles of chapters or sections, section numbers, acts, scenes, verses, etc.
- For papers in law, the legal standard is recommended (by way of example, cf. FORSTMOSER, P., OGREK R. et SCHINDLER B. (2018, Juristisches Arbeiten: Eine Anleitung für Studierende (6. Auflage), Zürich: Schulthess, or the recommendations of the Law School).

Supplementary aids
No supplementary aids.

Examination languages
Question language: English
Answer language: English

Examination content

All topics treated in the class will be part of the oral examination. Specifically, the content of the four chapters:

1. Empirical and experimental evidence on investors' behavior.
2. Behavioral models for individual decision making
3. Behavioral portfolio selection
4. Behavioral asset pricing

The individual examination paper consists in a critical assessment of a research paper in behavioral finance that will be distributed to students after the fourth session of the course.

Examination relevant literature
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 (CW21) 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 23 January 2020
- Information about examinations (examination aid regulations, examination content, examination-relevant literature) for decentral examinations after the 4th semester week on 16 March 2020
- Information about examinations (examination aid regulations, examination content, examination-relevant literature) for central examinations as from the starting date for examination registration on 6 April 2020

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