



Course and Examination Fact Sheet: Spring Semester 2019

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

Timetable -- Language -- Lecturer

[10,360,1.00 Quantitative Behavioural Finance with Applications](#) -- Englisch -- [De Giorgi Enrico](#)

Course information

Course prerequisites

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

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.

The goal of this class is twofold. First, to confront students with behavioral models that are build on different assumptions regarding investors' behavior, compared to classical models in finance. Second, to present new mathematical techniques needed to solve the behavioral models, thus equipping students with new useful mathematical tools.

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:

De Giorgi, Enrico (2019): Quantitative Behavioral Finance, Lecture Notes, University of St. Gallen.



Additional references:

Barberis, Nicholas and Richard Thaler(2003): "A Survey of Behavioral Finance," *Handbook of the Economics of Finance*, Edited by G.M. Constantinides, M. Harris and R. Stulz, Chapter 18, pp. 1051-1121. Available at <http://www.sciencedirect.com/science/article/B7GX8-4DXJCWN-F/2/6ecd46d1e00a53d527212a99dd5940c3> (restricted access from Uni St. Gallen network).

Shefrin, Hersh (2010): "Behavioralizing Finance," *Foundations and Trends in Finance*, 4(12), pp 1-184. Available at <http://ssrn.com/abstract=1597934>.

Shleifer, Andrei (2000): *Inefficient Markets: An Introduction to Behavioral Finance*, Oxford University Press, Oxford.

Wakker, Peter (2010): *Prospect Theory: For Risk and Ambiguity*, Cambridge University Press, Cambridge, UK.

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

Examination sub part/s

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., OGOREK 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 during the last session of the course.

Examination relevant literature

De Giorgi, Enrico (2019): Quantitative Behavioral Finance, Lecture Notes, University of St. Gallen.



Please note

We would like to point out to you that this fact sheet has absolute priority over other information such as StudyNet, faculty members' personal databases, information provided in lectures, etc. When will the fact sheets become binding?

- Information about courses and examination time (central/decentral and grading form): from the start of the bidding process on 24 January 2019
- Information about decentral examinations (examination-aid rule, examination content, examination relevant literature): after the 4th semester week on 18 March 2019
- Information about central examinations (examination-aid rule, examination content, examination relevant literature): from the start of the enrolment period for the examinations on 08 April 2019

Please look at the fact sheet once more after these deadlines have expired.