University of St.Gallen

8,159: Risk Management and Insurance

Subject information

ECTS-Credits: 4

Attached courses

Timetable	Language	Lecturer
8,159,1.00 Risk Management and Insurance	**English**	**Schmeiser Hato**

Course information

Course prerequisites

Basic know-how of Finance and mathematics

Course content

1. Introduction
2. Risk analysis, risk measurement and risk valuation
3. Risk management methods (risk finance and risk control)
4. Selected topics in risk management

Course structure

Course structure and outline

1. Introduction

1.1 Concept and function of risk management

1.2 Certainty, uncertainty, risk

1.3 Risk levels: Random, diagnostic, and forecasting risk

1.4 Risk sources and their consequences

2. Risk analysis, risk measurement and risk valuation

2.1 Risk analysis

2.2 Risk measurement: Modeling based on probability distri- butions

2.3 Risk valuation

2.3.1 Principle of expected utility

2.3.2 Market value concept

2.4 Rationality of risk management

3.Risk management methods

3.1 Risk control

3.2 Risk financing

4. Selected topics in risk management

4.1 Analysis of diversification effects

4.2 Estimation of liabilities with guarantees

4.3 Valuation of financial guarantees

4.4 Management of changes in interest rates

4.5 Hedging: An example from the oil industry

Course literature

Doherty, N. (2000): Integrated Risk Management - Techniques and Strategies for Reducing Corporate Risk, New York.

Hull, J. (2010): Options, Futures, and Other Derivatives, London.

Kling, A./Russ, J./Schmeiser, H. (2006): Analysis of Embedded Options in Individual Pension Schemes in Germany, in: Geneva Risk and Insurance Review (31), S. 43-60.

Smithson, C. W. (1998): Managing Financial Risk: A Guide to Derivative Products, Financial Engineering, and Value Maximization, 3. Auflage, New York.

Williams, C. A. Jr./Smith, M. L./Young, P. C. (1998): Risk Management and Insurance, 8. Auflage, New York.

Course additional information

Information about the Examination

Examination type

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

Examination aids

Closed Book

The following rules apply to all examinations irrespective of requirements and use:

- A simple pocket calculator is admissible (for the definition of simple pocket calculators incapable of communication, cf. general regulations concerning examination aids of 14 December 2010 and note the "Pocket calculators" fact sheet). Any other EDP and electronic means of communication such as notebooks, PDAs and mobile telephones, etc., are inadmissible.
- A bilingual dictionary (without handwritten notes) may be used if the examination questions and/or answers are not in the candidate's native language. Electronic dictionaries are inadmissible.
- The procurement of these examination aids is exclusively the students' responsibility.
- No other examination aids are admissible.

Question language: **English**
Answer language: **English**

Examination content

cf. course material (power point slides)

Exam-relevant literature

cf. course material (scriptum)

Attention please:

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 type (central/decentral and grading form): from the start of the bidding process on 24 January 2013
Information about decentral examinations (examination aids, examination content, exam-relevant literature): after the 4th semester week on 18 March 2013
Information about central examinations (examination aids, examination content, exam-relevant literature): from the start of the enrolment period for the examinations on 8 April 2013

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