

Stockholm Business School

Syllabus

for course at first level

Introduction to Financial Derivatives
Introduktion till finansiella derivat

7.5 Higher Education Credits
7.5 ECTS credits

Course code:FE3132Valid from:Autumn 2014Date of approval:2014-10-06

Department Stockholm Business School

Main field: Företagsekonomi

Specialisation: G1F - First cycle, has less than 60 credits in first-cycle course/s as entry

requirements

Decision

This syllabus was approved by the Board of Education at Stockholm Business School, Stockholm University 2014-10-06.

Prerequisites and special admittance requirements

45 credit points (högskolepoäng)

from Business Administration I and Business Administration II, or equivalent.

Course structure

Examination codeNameHigher Education Credits3132Introduction to Financial Derivatives7.5

Course content

This course provides an introduction to the financial derivatives markets. The course considers how investors and other corporations efficiently can utilize derivatives instruments for purposes such as risk control, arbitrage and speculation. The definitions of different kinds of derivatives are treated, including futures and forward contracts, options and swap contracts. Valuation principles, parities and models are analyzed and applied, including the Binomial model.

Learning outcomes

Intended Learning Objectives

The purpose of this course is to provide the participants with an understanding and intuition of the fundamental properties of standard derivatives as well as an ability to apply basic valuation methods. Upon completion of the course the students should be able to:

Knowledge and understanding:

- 1. Describe contracts and the functionality, describe concepts, and theories associated with standard derivatives contracts.
- 2. Understand the fundamental properties of standard derivatives contracts.

Skills and abilities:

- 3. Perform and interpret derivatives valuation by applying basic scientific valuation methods.
- 4. Perform and interpret derivatives trading strategies.

Judgement and approach:

5. Critically reflect on how commonly used assumptions and principles influence the derivatives markets.

Education

The course consists of a combination of lectures, seminars and group work and requires a significant portion of self-study on the part of students. Assessment for the course will be continuous and is carried throughout the different activities of the course.

The course workload is 200 hours equivalent to 7,5 ECTS (40 hours per week equivalent to 1,5 ECTS).

The language of instruction is English.

Please note that all teaching and learning activities - such as lectures, seminars, assignments and assessment tasks – are carried out in English when the language of instruction is English.

Forms of examination

Assessment for the course will be continuous and is carried throughout the different course activities. Each assessment task is weighted in relation to its importance in the overall assessment of the course. The student's results from the different assessment tasks are added up to a total course score that will then translate into the final grade for the course.

Assessment tasks

The course contains the following weighted assessment tasks.

- 1. Individual final written examination: assesses intended learning outcomes 1–5; constitute 70% of total course points.
- 2. Take-home written assignment: assesses intended learning outcomes
- 1–4; constitute 10% of total course points.
- 3. Take-home assignment with written and oral presentation: assesses intended learning outcomes 3, 5; constitute 10% of total course points.
- 4. Take-home assignment with written and oral presentation assesses intended learning outcomes 4, 5; constitute 10% of total course points.

Grading

After completion of the course, students will receive grades on a scale related to the intended learning outcomes of the course. Passing grades are A, B, C, D and E. Failing grades are Fx and F. A grade Fx can be completed for a grade E.

A course comprises 0–100 course points. Receiving a final passing grade requires \geq 50 course points. The scale for the final grade is tied to fixed score intervals: A: 90-100; B: 80-89; C: 70-79; D: 60-69; E: 50-59; Fx: 45-49; F: 45. The grades correspond to the total score points a student obtains (over a total of 100) for all the weighted assessment tasks combined as part of the continuous assessment for the course.

Each assessment task is awarded 0–100 points. The score for a single assessment task is the number of points multiplied by its percentage weight, and the combined total of score points for all weighted assessment tasks for the course are added up to a final score between 0 and 100 which then translates into a corresponding final course grade between A and F.

Assessment task 1 is assessed on a 100-point scale.

Assessment task 2 is assessed on a 100-point scale. 100-point scale in two intervals:

Pass: 50% = 100 points.
Weak: 50% = 0 points.

Assessment tasks 3 and 4 are assessed on a 100-point scale in three intervals:

- Pass with distinction: pass and oral presentation =100 points.
- Pass: 50% = 50 points.
- Weak: 50% = 0 points.

The student is responsible for completing the course's assessment tasks: that a sufficient amount of course points is earned and a passing course grade is obtained. The course's final assessment task can only be taken twice: 1) during the course, its first final assessment task; and, if a passing result (\geq 50 course points) was not achieved at the first occasion, 2) in the course's second, scheduled final assessment task. All other assessment tasks are only offered once during the course.

A passing grade (A–E) in the course is obtained when a student has achieved ≥ 50 course points.

A failing grade (Fx or F) in the course is obtained when a student has not achieved ≥ 50 course points:

- If 45–49 course points are achieved, a grade Fx is obtained, which can be completed for a grade E within 3 semester weeks after receiving instructions from the course director. If a complementary task is not completed within this time limit, and the course's two final assessment tasks have been accomplished, the course grade Fx is confirmed, implying that the student must re-register for the course and that previously acquired course points are forfeited. Note that first-time registered students have priority access to the seminar groups.
- If 45 course points are achieved, a grade F is obtained, implying that the entire course must be retaken and that previously acquired course points are forfeited. Students receiving a passing grade may not retake the final examination or complete a previously not completed assessment task to attain a higher grade. A passing grade may not be turned into a failing grade upon the request of a student.

Assessment criteria

Assessment criteria are designed as overall assessments, combined qualitative descriptions of what the student is expected to do in order to demonstrate how well the course's learning outcomes are achieved. The assessment criteria are based upon the general abilities as expressed in the degree objectives of the Higher Education Ordinance (appendix 2, System of Qualifications). The list of abilities below is a compilation of these degree objectives. To pass the course (grade E) students should demonstrate general ability to:

- recall, understand and explain course content, the course subject and its scientific basis and methodology;
- apply course content;
- critically analyse course content;
- orally and in writing present and discuss course content;
- meet standards of written presentation and formal accuracy on time.

The following assessment criteria are used to decide to what extent students have demonstrated these abilities and hence fulfil the course's intended learning outcomes, whereby a grading decision can be made. A higher grade-level presupposes the abilities at lower levels.

A (Excellent) \square

The student demonstrates ability to evaluate and relate to the content of the course from a comprehensive, critically reflective perspective, as well as to transfer and apply insights in new, meaningful contexts.

B (Very Good)□

The student demonstrates ability to, from an overarching and coherent perspective of the field, understand and use concepts to explain how different aspects of the course relate to each other, interconnect and become meaningful.

$C (Good) \square$

The student demonstrates ability to discuss the content, tasks and complex issues dealt with in the course from several well-developed but mainly independent perspectives.

D (Satisfactory)□

The student demonstrates satisfactory ability to discuss the content, tasks and complex issues dealt with in the course in a way that, albeit in-depth and elaborate, is decidedly one-dimensional.

E (Sufficient)□

The student demonstrates sufficient ability to discuss the content, tasks and complex issues dealt with in the course in a way that is decidedly one-dimensional.

Fx (Fail)□

The student's knowledge, skills and abilities display minor flaws, overall or in significant parts.

F (Fail)□

The student's knowledge, skills and abilities display major flaws, overall or in significant parts.

Interim

If the course is discontinued, or its contents are substantially altered, students have the right to be examined according to this syllabus once per semester for three further semesters.

Limitations

This course may not be included in a degree together with a course, taken in Sweden or elsewhere, of identical or partially similar content.

Required reading

Required Reading

- Jarrow R. and Chatterjea A., An introduction to Derivative Securities, Financial Markets and Risk Management. (See the study guide for ISBN.)
- Hull, J., Fundamentals of Futures and Option Markets. (See the study guide for ISBN.)
- A selection of academic articles as specified in the study guide.
- Lecture notes as specified in the study guide.

Recommended Reading

• Solutions Manual to text-book. (See the study guide for ISBN.)