

# Stockholm Business School

# **Syllabus**

for course at advanced level

Portfolio Theory
Portföljteori

7.5 Higher Education Credits 7.5 ECTS credits

Course code:FE4128Valid from:Spring 2017Date of approval:2016-11-14

Department Stockholm Business School

Main field: Företagsekonomi

Specialisation: A1N - Second cycle, has only first-cycle course/s as entry requirements

#### **Decision**

This syllabus was approved by the Educational Committee of the Stockholm Business School, Stockholm University, 2016-11-14.

# Prerequisites and special admittance requirements

Degree of Bachelor worth at least 180 credits, or admitted to Business Studies IV, Extended Course or Business Studies IV, Magister's Course, Master's programme, or equivalent.

## **Course structure**

Examination codeNameHigher Education Credits4128Portfolio Theory7.5

#### **Course content**

Portfolio theory studies how financial assets can be combined to give an optimal level of return, given the risk. The course gives a basic insight into portfolio management, which is relevant for banks, insurance companies and pension funds, for example. The course covers both theoretical pricing models for financial assets (CAPM, APT) and methods for evaluating the results of portfolio management.

The course covers the following areas: Efficient portfolios, Markowitz prescriptions, Diversification, Capital asset pricing model (CAPM), Arbitrage pricing theory (APT), Security analysis.

## Learning outcomes

**Intended Learning Outcomes** 

The overall aim of the course is to enable students to understand the game of returns and risk in portfolio theory, and to facilitate the application of standardized portfolio selection techniques in real-life while guiding them in critical-thinking with regard to recent advances in portfolio selection process.

Upon completion of the course, students should be able to:

Knowledge and understanding

1. Explain the basic connections between risk and returns in financial markets.

Skills and abilities

2. Prove and apply several evaluation models and standard portfolio selection techniques.

Judgement and approach

3. Construct and evaluate their own stock portfolios and moreover, put the implications of the theoretical models in contrast to empirical results.

#### 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. Group Project: assesses intended learning outcomes 3; constitutes 10% of total course points.
- 2. Seminar (individual) Project: assesses intended learning outcomes 1; constitutes 10% of total course points.
- 3. Individual final examination: assesses intended learning outcomes 1, 2 and 3; constitutes 80% 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 at least 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: less than 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 tasks number 1 and 2 are assessed on a 100-point scale in two intervals.

- Pass: 50% = 100 points.
- Weak: less than 50% = 0 points.

Assessment task number 3 is assessed on a 100-point scale.

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 be taken twice: 1) during the course's first scheduled occasion; and, if a passing result (at least 50 course points) was not achieved at the first occasion, 2) at the course's second, scheduled occasion. All other assessment tasks are offered once during the course.

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

A failing grade (Fx or F) in the course is obtained when a student has not achieved at least 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 less than 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.

Re-registration implies that:

- first-time registered students have priority access to the course's group registration;
- the final assessment task can be re-assessed without attendance at any of the course's other learning activities and without points from the course's other assessment tasks accredited.

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;
- problematise course content;
- •orally and in writing, present and discuss course content;
- assess course content in terms of scientific, social, and ethical aspects;
- relate course content to current social issues;
- meet standards of written presentation and formal accuracy.

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)

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.

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

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.

#### Misc

Exemption from an assessment task is granted if the student presents a valid reason and a written certification (such as illness and a medical certificate), whereupon the student may re-sit the assessment task at a later date while maintaining previously acquired course points.

Application for exemption should be submitted to the Director of Studies immediately after, or during planned absences well before, the date when the assessment task is carried out. A granted exemption expires at the end of the immediately following semester.

#### Required reading

Required Reading

• Modern Portfolio Theory and Investment Analysis by (Ed Elton and Martin Jay Gruber), latest edition.

Recommended Reading

• A selection of academic articles (updated each semester, see the study guide).