Stockholm Business School

Stockholm University

Syllabus

for course at advanced level

Advanced Operations Management
Avancerad verksamhetsledning

7.5 Higher Education Credits
7.5 ECTS credits

Course code:	FE4434
Valid from:	Spring 2019
Date of approval:	2018-03-19
Department	Stockholm Business School
Main field:	Företagsekonomi
Specialisation:	A1F - Second cycle, has second-cycle course/s as entry requirements

Decision

This syllabus has been adopted by the Education Committee at Stockholm Business School, Stockholm University, 2018-03-19.

Prerequisites and special admittance requirements

Bachelor's Degree comprising 180 HE credits, or the equivalent. English B.

Course structure

Examination code	Name	Higher Education Credits
4434	Advanced Operations Management	7.5

Course content

The course provides students with an advanced introduction of the-state-of-the-art operations management and relevant analytical tools with a focus on products and services.
It is primarily intended for the second-year student who studies the Master program in Operations Management and Control but highly useful for other SBS master programme students as well who wish to develop their quantitative skills.
Key topics that are covered in the course include: process analysis with and without variability; process flexibility; strategic operations management. Topics will be explained using Spreadsheet-based examples, etc.

The course consists of lectures, assignments, seminars, computer labs, and whiteboard exercises.

Learning outcomes

Intended Learning Outcomes

The aim of this course is to provide students with knowledge and key analytical tools in operations management with a focus on products and services.

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

Knowledge and understanding

1. Describe analytical frameworks for analysing processes.

2. Demonstrate understanding of quantitative tools used for analysing processes.

Skills and abilities

3. Perform quantitative analysis based on various metrics with and without variability.
4. Simulate cases using spreadsheets.

Judgement and Approach

5. Use quantitative analysis for evaluating process performance based on various metrics.
6. Reflect upon and evaluate quantitative tools and their strengths and weaknesses.

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.

Forms of examination

Assessment for the course will be continuous and is carried throughout the different activities of the course.

Each assessment task is weighted in relation to its importance in the overall assessment of the course. The student's results from these different assessment tasks are added up to a total course score corresponding to the final grade for the course.

Assessment tasks

The course contains the following weighted assessment tasks:

1. Individually written exam: assesses learning outcomes 1–6; constitutes 60% of total course points.

2. Seminars: assess intended learning outcomes 1–6; constitute 40% 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 100 course points. Receiving a final passing grade requires ≥ 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.
All assessment tasks are assessed on a 100-point scale. 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.

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 (≥ 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 ≥ 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 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;
• 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)

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.

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.

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

- Operations Management: Matching supply with demand. By Gerard Cachon and Christian Terwiesch. First edition published by McGraw-Hill, 2006.

Articles will be listed in the Study Guide.