



APPLIES TO ACADEMIC YEAR 2012/2013

## GRA 8157 Management of Projects

### Programme

Executive Master of Business Administration (EMBA) Program

### Responsible for the course

Jonas Söderlund

### Department

Department of Leadership and Organizational Behaviour

### Term

According to study plan

### ECTS Credits

5

### Language of instruction

English

### Introduction

In most sectors, the vast majority of improvement and innovation endeavors are carried out in projects. As a consequence, the ability to manage projects is critical for competitiveness and growth. This course will go beyond the standard and straightforward project management approaches but will deal with managing complexities that exist when you work in projects that are constrained in terms of time, budget, people and technologies.

Projects differ in two respects: complexity (magnitude of the effort, number of groups and organizations that need to be coordinated, and diversity in skills or expertise needed) and uncertainty (predictability of the final outcome in terms of time, cost and technical performance). Many concepts, models, methods and techniques have been developed and applied to manage projects with respect to the main elements of these dimensions. In addition, most projects need to be managed simultaneously and in connection to each other.

The ability to make a sound contribution to project management presupposes in-depth knowledge and understanding of the theoretical and empirical bases of project management. In this course, students will be challenged to examine the appropriateness, usefulness and academic status of project management principles and methods that are generally applied in the field of process and product innovation.

In this course, we deal with a variety of projects, ranging from quite predictable incremental product innovation projects to complex and uncertain radical product innovation projects. Uncertainty may exist at various levels. First it may be uncertain what processes need to be carried out to complete the project. Second it may be uncertain whether a given process leads to a certain desired outcome. Third, it may be uncertain how many resources and how much time is needed to perform the project.

In the course we discuss management concepts for projects with uncertainty in process execution. Furthermore we discuss the methods and techniques to control projects with uncertainty in processes such as: overlapping of development tasks, design iterations and prototyping, stage gates and frequent review meetings.

Empirical research regarding the results obtained with the use of these techniques for the control of various types of projects is also discussed.

### Learning outcome

#### Acquired knowledge:

After taking the course students are able to:

- understand the theoretical and empirical basis of project management;
- understand contemporary approaches to the management of projects;
- know the drivers of project success, and especially how to control, organize and evaluate for project success.

#### Acquired skills:

After taking the course students are able to:

- unravel the complex relationships within a project's constraints and within an multi-project organization;

**Reflection:**

After taking the course students are able to:

- apply a feedback perspective on managing complex issues within their projects or organizations

**Prerequisites**

Bachelor degree or equivalent, and at least 4 years of work experience, managerial experience and good to excellent written and oral knowledge of the English language. All deliverables will be in English. Please confirm our Student regulations

**Compulsory reading****Articles:**

Berggren, C., J. Järkvik & J. Söderlund. 2008. Lagomizing, organic integration, and systems emergency wards: Innovative practices in managing complex systems development projects. *Project Management Journal*, Vol. 39, No. 2. 111-122

Dahlgren, J. & J. Söderlund. 2010. Modes and mechanisms of control in multi-project organizations: the R&D case. *International Journal of Technology Management*, Vol. 50, No. 1: 22.

Eisenhardt, K.M., & Tabrizi, B.N. 1995. Accelerating adaptive processes: Product innovation in the global computer industry. *Administrative Science Quarterly*, Vol. 40. 84-110

Lyneis, J.M., & Ford, D.N. 2007. System dynamics applied to project management: a survey, assessment, and directions for future research. *System Dynamics Review*, Vol. 23. 157-189

Perlow, L.A., & Okhuysen, G.A., Repenning, N.P. 2002. The speed trap: Exploring the relationship between decision making and temporal context. *Academy of Management Journal*, Vol. 45. 931-955

Repenning, N.P., & Sterman, J.D. 2001. Nobody ever gets credit for fixing problems that never happened: creating and sustaining process improvement. *California Management Review*, Vol. 43. 64-88

Rudolph, J.W., & Repenning, N.P. 2002. Disaster dynamics: Understanding the role of quantity in organizational collapse. *Administrative Science Quarterly*, Vol. 47. 1-30

Söderlund, J.. 2011. Pluralism in project management: Research at the crossroad of specialization and fragmentation. *International Journal of Management Reviews*, Vol. 13. 153-176

**Recommended reading****Course outline****Day 1:**

The current state of research into the management of projects? The current state of the practice of the management of projects? Discussion of relevant literatures.

**Day 2:**

What are complexities and uncertainties in projects? How to unravel project complexities? The Project Management Game, Casual Loop Diagramming.

Group assignment between modules: Identify a complex project management problem in your own organization; analyze the behavior of this problem through causal loop diagramming; suggest a solution to this problem. Separate instructions will be distributed.

**Day 3:**

Debrief of assignment, The InnoCar Case, Techniques to deal with complexities and uncertainties.

**Day 4:**

The future challenges of the management of projects, Case assignment discussion, Linking strategy with projects.

Group term paper: Is the Stage-Gate approach suitable for future projects?

**Computer-based tools**

It's Learning

**Learning process and workload**

The course is conducted in a teaching module divided into two days each. Students will have classes all day for four days, a total of 32 hours. There will be assignments between the modules.

Please note that while attendance is not compulsory in all courses, it is the student's own responsibility to obtain any information provided in class that is not included on the course homepage/ It's learning or other course materials.

**Examination**

The course evaluation will be based on:

- 30 % - classroom contribution (oral, individual)
- 30 % - causal loop diagramming assignment (written and oral, team)
- 40 % - term paper (written report, team).

Specific information regarding student evaluation beyond the information given in the course description will be provided in class. This information may be relevant for requirements for term papers or other hand-ins, and/or where class participation can be one of several elements of the overall evaluation

**Examination code(s)**

GRA 81571 - Process evaluation; accounts for 100 % to pass the program GRA 8157, 5 ECTS credits

The course is an elective in Executive MBA and all evaluations must be passed to obtain a certificate for the degree.

**Examination support materials****Re-sit examination**

Re-takes are only possible at the next time a course will be held. When course evaluation consists of class participation or process elements, the whole course must be re-evaluated when a student wants to retake an exam. Retake examinations entail an extra examination fee.

**Additional information**