



Course Analysis MF2084

Managing Research and Development HT2020

Date and author: 2021-10-29 by Johan Arekrans

1 Course information

The aim of this course is to make students familiar with models and frameworks used in strategic management and organizing, and to give them in-depth understanding of how these models and frameworks can be skillfully applied in different R&D settings. A central aspect of this is to understand the inter-relationship between business strategies on the one hand and technology-, innovation- and R&D strategies on the other, in order to be able to work with, lead, and improve business-driven research and development activities. Furthermore, students should acquire substantial knowledge about the managerial challenges of organizing R&D activities in industrial firms and learn analytical frameworks, tools and methods for R&D management. The course comprises a set of lectures, exercises, and case discussion sessions. Moreover, students will perform a project in which they apply the theoretical models and frameworks that have been introduced throughout the course. The project concerns an analysis of specific R&D management issues and challenges, and to point to possibilities for improvement. More specifically, the lectures and exercises will focus on the following domains:

- Different theories and frameworks related to strategy
- Strategy on different levels in a firm, e.g. corporate, business, technology and R&D strategies
- Scenario analysis
- Organization theory and organization design
- Organizing and management of knowledge-intensive activities, R&D in particular
- Product strategies and portfolio management
- Product families, platforms and modularization

Students are expected to participate actively in class discussions, and will for some of the class sessions be asked to undertake preparatory work, in groups or individually. These preparations include the execution of a scenario analysis, and the analysis of one case study (performed in groups)."

Course responsible teacher:

Johan Arekrans

Other teachers in the course:

Mats Magnusson

Jens Hemphälä

Gunilla Ölundh Sandström

Examiner:

Mats Magnusson

Learning activities:

Lectures, workshops, seminars, individual essays, group project assignment and a written exam

Additional Comments**2 Students' view of the course**

Summary of students' view of the course based on for example LEQ survey and/or interviews or other activities.

Response rate of LEQ course evaluation survey:

3% (1 out of 36)

Brief summary of students' responses from the LEQ survey and/or other types of course evaluation:

Based on the survey response, the content of the course was appreciated. The digital format due to the Covid-19 pandemic appears to have had a negative effect on the social interaction in the course (e.g. open atmosphere) and the possibility to get regular feedback. The project appears to have worked adequate in the digital format, but the workshops and lectures were negatively impacted.

Six students also gathered for discussing all courses given that period, these are the notes they shared:

Positive aspects MF2084:

- Really structured balance of project and examination
- Course content and its execution was one of the best until now

Negative aspects MF2084:

- The final deliverable were together with the other courses in that semester. So, it makes it pretty hectic.

Additional Comments

The LEQ survey unfortunately only had one complete response after two reminders were sent out.

3 Teacher analysis of the course

The analysis should present the development of the quality of the course as well as measures that have been taken after previous course analysis. The course's strengths and weaknesses based on the course evaluation and the teacher's reflection.

Changes of the course before this course offering:

- A clearer overview of the course grading was introduced based on previous survey responses
- The project assignment had two changes
 - o Clearer focus on identifying relevant literature earlier in the project
 - o Longer time allocated for peer review

The course's strengths (based on the students' experiences and the teacher analysis):

The course content in this course can be challenging for students who primarily have studied technical subjects. By promoting active participation and using real-life examples during lecture discussions, the course seems to do a good job in sparking the interest of students who are previously unfamiliar with the subject. The project allows students to get a first contact with industry, as they are encouraged to interview R&D personnel.

Areas for improvement of the course (based on student experiences and teacher analysis):

The autumn of 2020 was very special, as the course was conducted in a digital or hybrid-form. As such, it is difficult to draw any conclusions on the course content from this period. However, our experience is that students tend to be less active in discussion in the digital setting, therefore, we strive for physical lectures and workshops for HT21 (also reflected in the LEQ survey).

Proposed changes to the next course round:

- o The Canvas page has been updated for providing relevant articles in a clearer way, to encourage additional readings, the ITM e-learning team will be contacted for further suggestions.

Additional Comments

- o Discussion on a digital exam are in progress.