



Course syllabus

Faculty of Technology

Department of Informatics

1IK005 Verksamhetsmodellering, 7,5 högskolepoäng

Business Modeling, 7.5 credits

Main field of study

Informatics

Subject Group

Informatics/Computer and Systems Sciences

Level of classification

First Level

Progression

G1F

Date of Ratification

Approved 2009-09-08

Revised 2016-11-02 by Faculty of Technology. Content and literature lists are revised.

The course syllabus is valid from spring semester 2017

Prerequisites

Introduction to Informatics (1IK001) and Business Analysis (1IK031), or equivalent.

Objectives

After completing the course, student is expected to

- account for different process-oriented approaches and techniques for modeling and analyzing business operations with respect to activities, data and information flows, information resources, and value creation and customer-orientation;
- methodically analyze and create models using different techniques and modeling approaches to visualize business operations processes with respect to the above; and
- reflect upon and evaluate their applicability and usefulness to different types of business operations.

Content

The course covers methods and techniques for modeling business operations from a process-oriented perspective, with respect to activities, information flows and resources, information resources, and value creation and customer-orientation. Methods and techniques covered are Business Process Modelling Notation (BPMN), Data Flow Diagramming (DFD) and Value-based process modeling (VPM). Case reports of various business operations are used to train in these methods and techniques. Furthermore, the course covers the use of computer-based tools to model and document these.

Type of Instruction

The course consists of lectures, seminars and assignments. The seminars and assignments are conducted in groups.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Assessment of performance is made through collective reporting of exercises and through individual written exam. Exercises are reported both in writing and through presentations. Exercises may only be graded as pass. Individual written exam may be graded as pass with distinction.

To pass the course requires a minimum passing grade from the exercises and the written exam. For a pass with distinction grade of the course is required, in addition to a pass with distinction grade of the written test, a passing grade on exercises where performance demonstrates very good understanding of modeling techniques and a high level of analytical ability, accuracy and valuation capabilities.

Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Required Reading and Additional Study Material

Main literature

Dennis, A., Wixom, B.H., & Roth, R.M., *System Analysis and Design*, 6th Edition, Wiley, 2014, 50 (430), ISBN 9781118897843.

Ljungberg, A., & Larsson, E., *Processbaserad verksamhetsutveckling*, 2a uppl., Studentlitteratur, 2012, 300 (540), ISBN 9789144059761.

Silver, B.S., *BPMN Method and Style, 2nd Edition, with BPMN Implementer's Guide*, Cody-Cassidy Press, 2011, 140 (270), ISBN 9780982368114.

Myndigheten för samhällsskydd och beredskap (MSB) och Riksarkivet, *Vägledning för processororienterad informationskartläggning*, Publ.nr MSB493, 2012, 43 (43), ISBN 9789173832915.

Secondary literature

Avison, D., & Fitzgerald, G., *Information Systems Development: Methodologies, techniques and tools*, 4th ed, McGraw-Hill, 2008, 50 (656), ISBN 9780077114176.