Linnæus University

Dnr: LNU-2024/4545

Course syllabus

Faculty of Technology
Department of Informatics

1IK054 Analys av verksamhetsdata, 7,5 högskolepoäng
Business data analysis, 7.5 credits

Main field of study
Informatics

Subject
Informatics/Computer and Systems Sciences

Level
First cycle

Progression
G1F

Date of Ratification
Approved 2022-06-27.
Revised 2024-12-02. Literature list is revised.

The course syllabus is valid from spring semester 2025.

Prerequisites
Business analysis (1IK031), or equivalent

Objectives
After completing the course the student is expected to:

- A.1 describe technologies and theories related to decision making
- A.2 present theories and methods for digital data management.
- A.3 explain theory and method for analyzing and presenting business data.
- A.4 demonstrate skill in using data analytics system to manage business data, for

analysis and presentation of data.

- A.5 explain how business data analysis can contribute to business strategies'.
- A.6 show abilities in writing reports and presenting resutlts in context of SSBA.

Content

The course adresses the following areas:

- the general process of data analytics from a practical and theoretical perspective,
- introducing decision-making theories and the need for technologies to support decision-making process,
- critical and important parts of the data analytics process including, business case analysis, business-driven data management technologies, the creation of analytics using self-service tools, visualization for business cases, results interpretation for strategic decisions,
- discussion of selected contemporary trends and developments in the area of Business Analytics.

Type of Instruction

The teaching consists of lectures, laboratory work and seminars.

Examination

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

Individual assignment - A report related to aspects of business data analysis.

Group project (group) - A project that brings together the course content and acts as a final test of the student's ability to develop well-founded decisions based on data analytics.

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second-cycle level at Linnaeus University.
If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

Objectives achievement

The examination of the course is divided as follows:
Module 2301 Seminar 1.0 credits with the grading system UG
Module 2302 Individual assignment 3.5 credits with the grading system UV
Module 2303 Group assignment 3.0 credits with the grading system UV

The examination elements are linked to the course objectives in the following ways:
Module 2301 links to the course objectives: A.1, A.2, A.3
Module 2302 links to the course objectives: A.1, A.2, A.3, A.6
Module 2303 links to the course objectives: A.1, A.2, A.3, A.4, A.5, A.6

Course Evaluation

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously

Required Reading and Additional Study Material

Mandatory

Sharda, Ramesh, Delen, Dursun, & Turban, Efraim. (2021). *Analytics, data science, & artificial intelligence: systems for decision support*. Pearson.

Scientific journal articles, compendium, and digital materials. Approximately 300 pages.

Recommended reading

Milligan, Joshua. *Learning Tableau 2022 - Fifth Edition: Create effective data visualizations, build interactive visual analytics, and improve your data storytelling capabilities*. Packt Publishing.