



Faculty of Arts and Social Sciences
Media and Communication Studies

Syllabus

Data Visualisation and Communication

Course Code: MKGB96

Course Title: Data Visualisation and Communication
Datavisualisering och kommunikation

Credits: 15

Degree Level: Undergraduate level

Progressive Specialisation: First cycle, has less than 60 credits in first-cycle course/s as entry requirements (G1F)

Major Field of Study:

MKA (Media and Communication Studies)

Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2024-06-24, and is valid from the Spring semester 2025 at Karlstad University.

Prerequisites

Registered for MKGB90 Technical Foundations of Digital Media and Digital Design, 15 ECTS credits, and MKGB91 Digital Analysis Methods, 15 ECTS credits, or equivalent

Learning Outcomes

Upon completion of the course, students should be able to

1. explain the strengths and weaknesses of examining, analysing, and presenting data visually,
2. collect secondary data and open data in relation to a given research question,
3. organise and structure data in order to facilitate data processing and visualisation,
4. use visual methods of analysis to examine data sets and explain relations present in the data,
5. create data visualisations using industry standards for visualisation tools,
6. design and give reasons for suitable colour schemes and design choices for different types

of data and specific communication needs, and

7. apply and reflect upon the perspectives of aesthetics, research, function, and ethics in relation to critique of data visualisations.

Content

Students develop the ability to analyse and present data using visual tools and methods, as well as skills in collecting secondary data and open data, and in organising and structuring this data to facilitate further analysis.

Methods for visual examination and analysis of data include for example the creation of visualisations to investigate the distribution of single variables, the relationship between two quantitative variables, time series data, and cartograms and choropleth maps used to visualise geographical data.

Students learn to apply core principles of information design related to perception, colour, and formats by working on practical cases. Students also acquire skills in the creative design of visualisations that meet specific communication requirements.

Reading List

See separate document.

Examination

Assessment is based on written hand-in assignments completed in groups and individually and presented orally in seminars.

Learning outcomes 1 and 7 are also assessed based on an individual written hand-in assignment.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.