FLS3104 Visualize your Science 4.0 credits

Visualisera din vetenskap

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for FLS3104 valid from Autumn 2017

Grading scale

Education cycle

Third cycle

Specific prerequisites

The course is primarily aimed at doctoral students, postdocs, and researchers.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The aim of the course is to help the participants develop their ability to communicate with visuals, with a focus on images and illustrations for scientific posters and presentations.

On completion of the course, the student should be able to:

- describe and apply basic principles of graphical design by the use of colours, fonts and composition
- create audience-adapted images that attract attention, lead the viewer through a poster, and effectively communicate the student's message.
- describe and apply the basic principles of effective visual presentation of results.
- use software for creating images
- describe how copyright works, and be able to use visual material produced by others within the scope of copyright rules and regulations.

Course contents

Combining theory and practice, the course consists of home assignments and lectures through which the student moves from beginner's to advanced level in visual rhetoric and the use of illustration software. At the end of the course, students will have produced a graphical abstract that describes their own research and a scientific poster based on principles of effective graphic design. Students will also have practiced analysing, and giving constructive feedback on, visualisations such as overview images, flowcharts, results graphs, posters and graphical summaries from various research areas.

Central themes in the course:

- Basic building blocks and principles of graphical design.
- Use of colours, fonts and composition for effective communication.
- Basic principles of graphical presentation of research data and results.
- Effective posters based on templates.
- Effective posters based on principles of graphical design.
- Images adapted to the intended audience.
- News graphics, and how such graphics can be adapted for scientific purposes.
- Image ethics and copyright.

Course literature

Course material and handouts provided by the teacher.

Equipment

Possibility to print posters in A0 format.

Examination

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade

Active participation in the course meetings, and a pass grade on all home assignments.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.