Kursnamn: Scientific Data Presentation

Name of course

Omfattning (höskolepoäng): 3

ECTS credits

Tidsperiod: September – October 2013

Course period

Antal platser: 20

Maximum number of participants

Undervisningsspråk: English

Language of instruction

Kursens syfte samt motivering till varför den bör vara fakultetsgemensam (max 150 ord)

Aim of course and motivation as to why it should be considered “multidisciplinary” to the extent that the faculty should allocate extra financing.

The goal of the course is to give PhD students the ability to effectively present the data resulting from their experiments. This is a very important form of communication for any researcher, just as important as writing and speaking.

All researchers at our faculty deal with numeric data on a day to day basis. We first plot this data to understand it ourselves, then use those same graphs in our presentations, posters and journal articles. However, this is not necessarily the best way to present that data. Poor graphs are published all the time: graphs that need lots of explanations before they are understandable, graphs that waste valuable space, or simply ugly graphs. With a little thought and some knowledge of tools, graphs can be effective, efficient and beautiful.

We aim to have students from many different backgrounds, as their differing points of view will be very useful in the context of the course.

Kursinnehåll, kursens uppläggning samt examinationsform (max 150 ord)

Contents, study format and form of examination

The course will cover different forms of graphs and tables for one and two-dimensional sampled data, categorical data, discrete values, etc.; certain aspects of human perception relevant to displaying data, including colour perception; the need to highlight the story in the data, refraining from displaying the non-essential things (without, of course, misrepresenting the data); and how to use drawing tools such as Illustrator or Inkscape to edit figures generated by Excel, MATLAB, or any other graphing tool.

The course will have some lectures and demos. Additionally, many real-world examples will be dissected and discussed. By redesigning published graphs, the student will get hands-on experience with the iterative process of designing effective data displays.

To receive credit, students are expected to attend all lectures and discussion sessions, and do some design work in small groups and alone. These design projects will be the basis of some of the discussion sessions.

Målgrupp/er (specifiera ämnen/inriktningar) samt rekommenderade förkunskaper

Target group/s (specify, if possible, subject/specialization) and recommended background
All PhD students from the faculty are welcome, as the course topic is applicable to all subjects. No specific knowledge is required, besides that expected of any PhD student.

As said before, we aim to mix students from very different backgrounds, and therefore will try to limit the number of students from any one institution. We will also welcome students from other faculties and from other universities.

Huvudansvarig institution  Information Technology, Division of Visual Information and Interaction
Department with main responsibility

Andra inblandade institutioner (specifiera hur).
Other departments involved (specify how).
none

Kontaktperson/er (namn, e-postadress)
Contact person (name, e-mail address)
Cris Luengo, cris@cb.uu.se

Anmälan om kursdeltagande till
Application from course participants should be sent to
Cris Luengo, cris@cb.uu.se

Senast  2 weeks before course start
Not later than