

Proposed cross-faculty PhD course:

Scientific Public Relations, ~3 hp, Daniel T. Simon

Course description

“Scientific Public Relations” (SciPR) will be a course on various skills and techniques for communicating scientific results with the public. Specifically, these will include presentation techniques, preparation and planning of manuscript figures, some discussion of the manuscripts in general, and even some discussion of the use of social media and online tools.

The course is an evolution of the “Presentation Short Course” (1.5 hp) which has been given for the past 3 years by Daniel Simon at ITN. The Short Course covered only presentation techniques.

Course plan

SciPR will consist of four (or five) 2-hour meetings, covering the following topics:

1. Presentation skills and techniques 1
 - a. Why do we present?
 - b. Confidence, and when to say “I don’t know”
 - c. Projecting your brand
 - d. Efficient and effective use of slides
 - e. Best practices for colors, figures, templates
2. Presentation skills and techniques 2
 - a. Best practices for fonts and text formatting
 - b. Animations and transitions
 - c. Tips and tricks in the presentation software
 - d. Presentation tools other than PowerPoint and Keynote
 - e. Tips and tricks for presentation hardware (computer, remotes, projector)
3. Scientific illustration and social media/online tools
 - a. Importance of good figures
 - b. Best practices
 - c. Software and workflows
 - d. Broadcasting scientific results with social media
 - e. Online tools (Altmetric, LiU parallel publishing)
4. Presentation seminar (required for obtaining course points)

The first 3 course meetings will be lecture format. The final course meeting will consist of a seminar where the students (in groups of ~4) will present a presentation and scientific illustration(s) developed using the techniques from the course.

In order to appeal to students from all departments, the subject for the seminar presentation can be whatever the students decide as long as it has data/information that must be visualized (*e.g.*, hockey statistics, the Linköping city budget, or topics in cosmology).

Software is not required for the course. However, the presentation component will be based on PowerPoint and similar style programs (*e.g.*, Apple Keynote, OpenOffice). The scientific illustration component of the course will be demonstrated using Adobe Illustrator, but the vector-illustration concepts will be applicable to other software (*e.g.*, PowerPoint, Inkscape, Corel Draw, etc.)

Course credits (around 3 hp, to be decided) will be awarded based on attendance and active participation in the seminar. If the student cannot attend the seminar, a “make up” presentation and illustration can be discussed with the teacher.

Evaluation of previous courses

I've gotten really positive feedback all the times that I've given the course. And students at all levels seem to have appreciated the broad topics that I've covered in presentation technique. The best feedback though is seeing students actually applying the tips and tricks to their presentations after the course was over. This has been particularly motivating for me, and has been the main cause for my thinking about expanding the course. I'd love to see similar development of figure and graph technique in students' published articles!

Audience, which PhD students does the course target

SciPR will be designed for all PhD students who will need to present or publish – that is, **all** PhD students! Most previous versions of the course have been given to TekFak students, but I did give a slimmed-down version for pedagogical students, and they seemed to appreciate it just as much. Of course, my own “flavor” is natural sciences, but the contents of the presentation and illustration course will be broadly useful. Even for students that won't have a strong focus on “hard data” in their presentations, there will be coverage of style, branding, demeanor, etc.

Motivation for a cross-faculty course

All PhD students (and all faculty) need to present their results to a broader audience. Most often, this spread of knowledge takes the form of PowerPoint presentations and peer-reviewed articles. Gaining skills in both of these types of dissemination will equip PhD students with the tools they need to proceed in their career and impress their colleagues and networks with their competence and confidence. The tips and tricks that they can learn in the SciPR course may even facilitate publication in higher-impact journals, since it is well-known that editors quickly scan through submissions to decide which will and which will not go to review; nicely formatted and well-presented figures can go a long way!

Finally, this course can (do a small part to) help promote the LiU brand. If our PhD students present with style and confidence (and LiU templates!), and their publications/figures are seen as clear and informative, then our university's image and reputation will be strengthened.

Financing

I am requesting 55 tkr to fund my time developing this course. This time will include a revision of the existing presentation-focused material, as well as literature search for new/best practices, and some investigation of the psychological aspects of presentation and illustration from both the audience's and the presenter's perspectives.