

## Syllabus

### PNG0073 Visualize Your Science, 4.0 credits

#### Syllabus approved

2017–12–21 (from )

#### Subjects

Image Analysis

#### Education cycle

Third cycle

#### Modules

Title	Code	Credits
Single module	0101	4.0

#### Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

#### Language

English

#### Prior knowledge

The course is primarily intended for PhD students within the SLU Graduate School Organism Biology but is open to all PhD students at SLU. Other SLU staff is welcomed if space allows. There are no formal entry requirements to take the course.

#### Objective, including learning outcomes

The course objective is to help the participants develop their ability to communicate with visuals. The focus is on figures and illustrations for scientific presentations and posters.

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

- describe and apply basic principles of graphical design by the use of colors, fonts and composition
- create audience-adapted images that attract attention, lead the viewer through the image, and communicate the intended message.
- describe and apply the basic principles of effective visual presentation of results.
- use illustration software for creating and modifying figures, images and illustrations.
- describe how different image licenses works, and be able to use visual material produced by others within the scope of those licenses.

#### Content

The course is a mix of online modules and face-to-face sessions. Combining theory and practice, the course consists of lectures and home assignments 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 analyzing, and giving constructive feedback on, visualizations 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 colors, fonts and composition for effective communication.
- Basic principles of graphical presentation of research data and results.
- Effective posters based on templates and on principles of graphical design.
- News graphics, and how such graphics can be adapted for scientific purposes.
- Image ethics and copyright.

#### Requirements for examination

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

#### Additional information

The course is given by Andreas Dahlin who is the founder of the company Visualize your Science. He organizes and teaches the course on behalf of the SLU graduate school Organism Biology.

There is no tuition fee for SLU staff registering for the course through the Organism Biology research school. Please note that the course is offered in parallel also in other cities/campuses but that Organism Biology will only cover fees and other expenses for registrations made through the Organism Biology research school. The number of participants registering through Organism Biology is limited to 20 per course occasion.

The course is a mix of online modules and face-to-face sessions. Theory and drawing tutorials are online whereas feedback sessions are face-to-face. We will meet in four one-day face-to-face sessions. For the last session, which is in the form of a mini-conference, participants will need to print an AO poster. The research school will cover the costs for printing the poster. If you cannot attend one of the face-to-face sessions, it is possible to attend the same session at a course given in another city or online.

You can read more about the course at the course webpage ([https://visualizeyourscience.com/vys\\_spring](https://visualizeyourscience.com/vys_spring)).

If you have further questions about the course you can contact Andreas directly by email ([Andreas.dahlin@visualizeyourscience.com](mailto:Andreas.dahlin@visualizeyourscience.com)) or by phone (0707 468144).

#### Responsible department

Department of Plant Biology