Introduction to Open Science for PhD Students

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Why should we focus on Open Science skills for PhD Students?

Challenges facing PhD students:
- The Research Training
- The “Career Defining Output”

Many research practices in a state of change
(data management, publishing, transparent and reproducible methods)

May add additional component of uncertainty for inexperienced researchers – need support!

Agents of change as future leaders!
The Research Data Life Cycle + Open Science Practises = A Course, of Course!

**In the beginning of your research project**
- How should I plan and organize my research project?
- Which laws and regulations affect my research?
- Does my project require ethical approval?
- How do I write a Data Management Plan?

**During your research project**
- How do I describe my research output so that others can find, understand and reuse it?
- What about information security? Can I use cloud storage?
- How do I use and cite another person's work?
- And how does reference management software work?
- How should I store data? And where?

**When you are about to publish**
- Which journal should I choose and how do I publish Open Access?
- Who pays the article processing charge?
- I have almost finished my thesis, what must I do before printing?

**At the end of your research project**
- How do I make my research data available? Can everything be shared openly?
- How may others use my research material?
- Storing and archiving research data, what’s the difference?
Designing an Open Science Course for PhD Students

- Late 2019: Stockholm University Library project group plan an introductory course on Open Science
- Staff with expertise in publishing, licensing, research data management, teaching
- Drafted course plan, spring of 2020 formed collaboration with the Department of English, 5 ECTS course approved by the Faculty Board
- Important to offer credits to students to make it worthwhile
- Opened for applications in fall of 2020 and successfully given in spring 2021!
Online teaching and international student group

- 17 PhD students from multiple disciplines and international Universities
- Conducted all teaching online, seminars twice per week – all material recorded and available on teaching platform for student learning flexibility
- Exercises and assignments closely linked to the student’s research to investigate OS practises, possibilities and barriers in own field
- Active participation and knowledge sharing!

“...the interdisciplinary and international character of PhD students' participation, was one of the most positive characteristics of the course” (2021 Student)
Aiming for the OS core and hands-on skills

Focus on core Open Science practises and directly applicable skills:

Module 1: The rationale and aims of the Open Science movement
Module 2: Good Research Data Management (+DMP), FAIR and Open Data
Module 3: Open Access Publishing, Licensing
Module 4: Navigating the OS landscape in a final report
Positive course feedback and aiming to reach supervisors

Student feedback after the course very positive:
- 93% satisfaction with course content
- 94% would recommend this course to others

Aim to continue providing students with support using formal courses

Next step:
- Offer training and support to supervisors and faculty members to facilitate and encourage discussions about openness

“Everyone should take it. Even supervisors (or especially)”
(2021 Student)
Thank you!

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For more information:
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