

ENG-801

Open Science in Practice (2017)

Dal Peraro Matteo, Vacat .

Cursus	Sem.	Type
EDOC General and external courses		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Project report
Workload	60h
Hours	56
Courses	32
Exercises	24
Number of positions	30

Remark

Held from September 25th to 29th at EPFL

Summary

Open science regroups initiatives that use digital technologies to change knowledge production, dissemination and reuse. This doctoral course will introduce concepts and tools that can help produce better and more impactful research. Topics will include publications, research data and code.

Content

Primarily aimed at students pursuing a doctoral degree at EPFL, this summer school will give a general overview of what Open science can mean in practice.

Four morning sessions will be dedicated to background information on Open science in general (Day 1), publications (Day 2), data (Day 3), and code (Day 4). Each afternoon will be dedicated to hands-on activities such as the identification of disciplinary standards (Day 1), channels for knowledge dissemination (Day 2), how to describe and reuse research data (Day 3), best practice for sharing code and methods (Day 3). The last day (Day 5) of the week-long course will be open to everyone from EPFL and will focus on researchers who are already active on campus, or who are interested in Open science.

The participants will be asked to write an essay before coming to the summer school, and then to write a report after the summer school. The evaluation of the students will be based on these two documents, requiring a total of 16 hours to complete, in addition to the 40 hours of lectures and workshops planned during the week.

Day 1 (Monday) - Introduction - Chair: Luc Henry

8:45-09:00 – Welcome by Martin Vetterli

A very short introduction to Open Science: personal story and motivations

09:00-10:00 – Benedikt Fecher, Humboldt Institute for Internet and Society, Berlin

What is going on? Introduction to Open science: Five school of thoughts

10:30-11:30 – Arnaud Vaganay, LSE

TBD

11:30-12:30 – Laurent Gatto, Computational Proteomics Unit, University of Cambridge

Why I adopted Open science as a best practice

14:00-18:30 – Workshop I

Day 2 (Tuesday) - Publications - Chair: Béatrice Marselli, EPFL library

8:45-09:00 – Welcome and introduction to Day 2

09:00-10:00 – Jessica Polka, Director of #ASAPbio

The role of preprints in biology (and in general), and how to run journal clubs with preprints

10:30-11:30 – Lawrence Rajendran, founder of Science Matters

New publication strategies: alternatives to peer-review, nanopublications, etc

11:30-12:30 – Kirstie Whitaker

Publishing a reproducible paper: practical considerations

14:00-18:30 – Workshop II

Day 3 (Wednesday) - Research Data - Chair: Aude Dieudé, EPFL library

8:45-09:00 – Welcome and introduction to Day 3

09:00-10:00 – Oleg Lavrovsky, OpenData.ch

The power of open data

10:30-11:30 – Marta Teperek, Cambridge Big Data

Sharing research data: a community challenge

11:30-12:30 – Lucia Prieto, UNIL Neurosciences and TReND in Africa

Open source hardware in research

14:00-21:30 – Workshop III

Day 4 (Thursday) – Code and tools - Chair: Hannah Short / Jens Vigen, CERN

8:45-09:00 – Welcome and introduction to Day 4

09:00-10:00 – Victoria Stodden, University of Illinois at Urbana-Champaign, USA

Reproducibility in code: motivations and incentives

10:30-11:30 – Gaël Varoquaux, Inria Saclay, Paris, France

The tools - languages, git, infrastructures, the cloud and the wiki

11:30-12:30 – TBC

Good practices

14:00-18:30 – Workshop IV

Day 5 (Friday) – Open Science Show - EPFL actors - Chair Luc Henry

09:45-10:00 – Welcome and Introduction, Chair: Luc Henry

10:30-11:30 – EPFL case studies I and II

11:30-12:30 – EPFL case studies III and IV

14:00-15:00 – EPFL case studies V and VI

15:00-16:00 – Presentations by participants

16:00-16:30 – Closing remarks – Luc Henry

16:30-18:00 – Drinks and informal discussions

Note

there will be a website (likely online in early July) at the following url: osip2017.epfl.ch

Keywords

Open Science, Best Practice, Scholarly Communication

Resources

Websites

- <http://osip2017.epfl.ch>