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Module IV: Data Classification and Storage Selection

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The University of Oslo Library

Materials developed as part of the *Skills development project for research data*:
https://www.ub.uio.no/english/about/projects/rdm-skills/

Agenda

- What types of data do you have?
- Data categories and their color-coding
- Data storage based on data category
- Q&A session

Zoom Feedback Test

Open the menu "Participants" / "Reactions" and click on "**Yes**" in the bottom of the menu. Then click on "**No**".
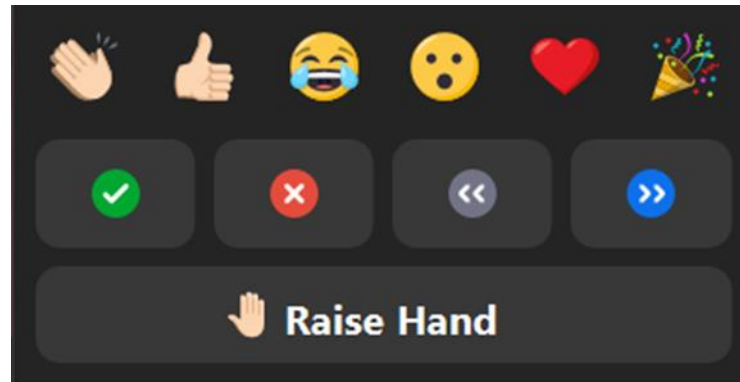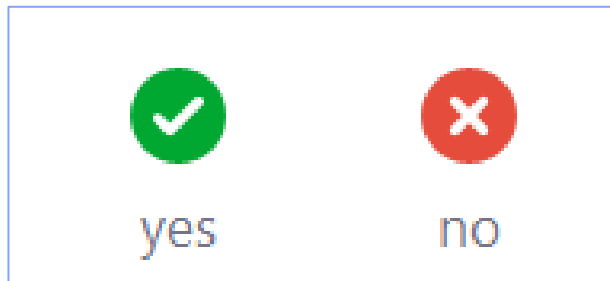
Types of research data

- Qualitative or Quantitative?

- Observational, Experimental, Computational or Records?

- Personal data or not?
  - <u>General (non-sensitive) personal data</u>:
    - name, address, phone number, e-mail, exam grades, case documents, e-mail communication, audio- and video-recordings, images, log-in activity
  - <u>Sensitive personal data</u>:
    - health information, biometric or genetic information, ethnic or racial origin, political/philosophical/religious perceptions and beliefs, sexual orientation, sexual relationships, trade-union membership

On ownership

- All UiO information shall have an unambiguous and identifiable owner.

- Anyone should easily be able to find out who is responsible for keeping the information updated, maintained and correctly labeled.

- The «information owner» is responsible for the assessment used to place the information in its given category.

- In those cases where an owner cannot be identified, the University Director is responsible for the information.

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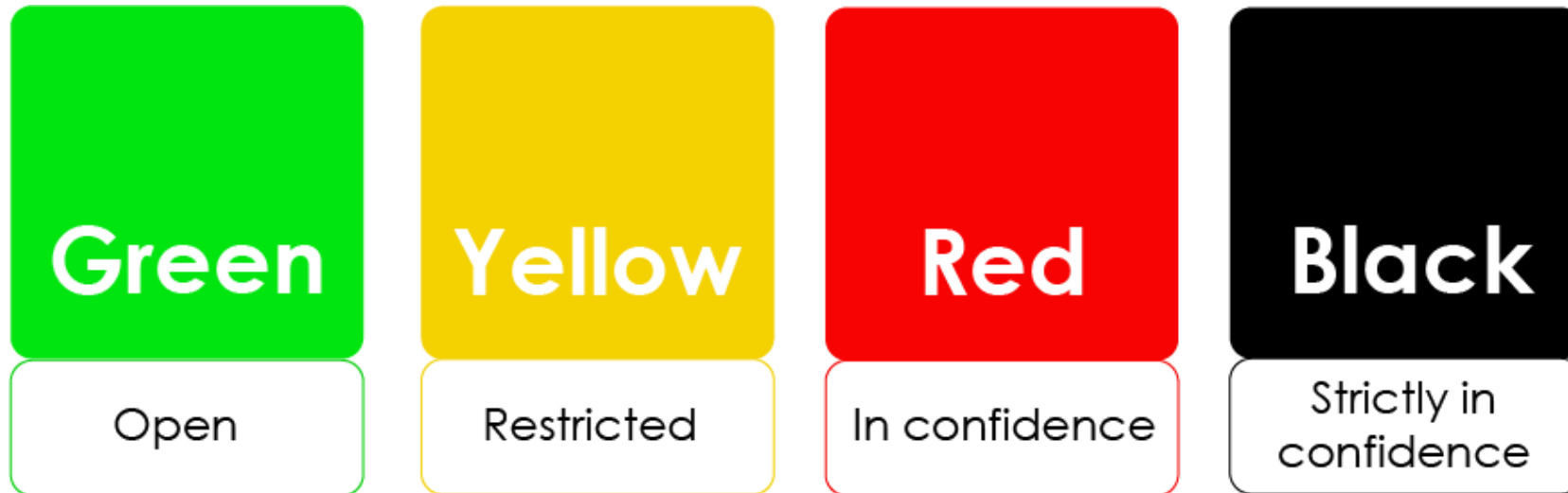# On ownership – How to decide which class to use?

- **Always put the information in a sufficiently safe class.**

- If you are not sure whether to your information is red or yellow, choose red.

DATA CLASSIFICATION

Classifying your data

Green — Open
Yellow — Restricted
Red — In confidence
Black — Strictly in confidence

https://www.uio.no/english/services/it/security/lsis/data-classes.html
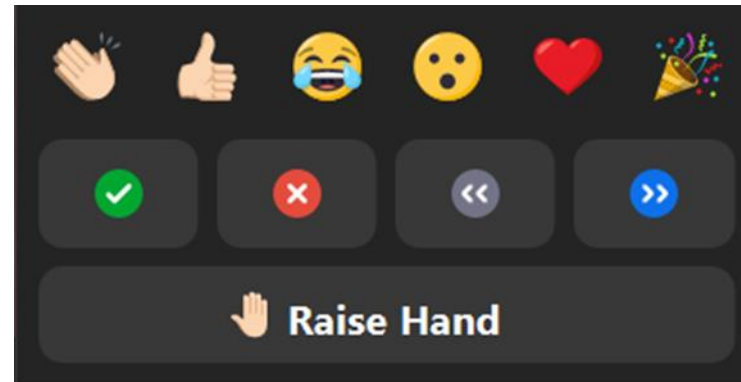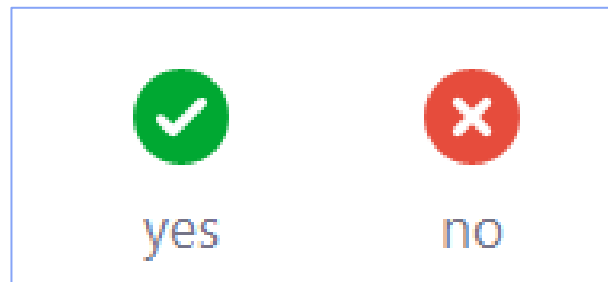
What is **green** data

- Open or freely available
- This class is used when it **does not cause any harm** to the institution if the information becomes known to unauthorized persons.
- Any research that is published openly. Information that is not public, needs to be removed first.
- Teaching material that is not subject to copyright
- Completely anonymous data
- Data without any financial or commercial value
- Statistics

Question 1

Do you think you (will) work with **green** data?
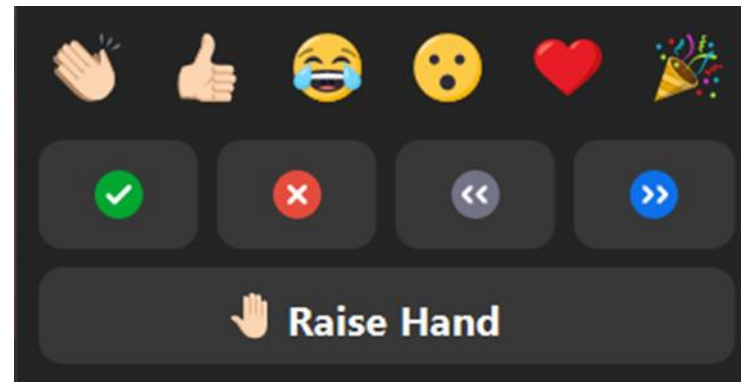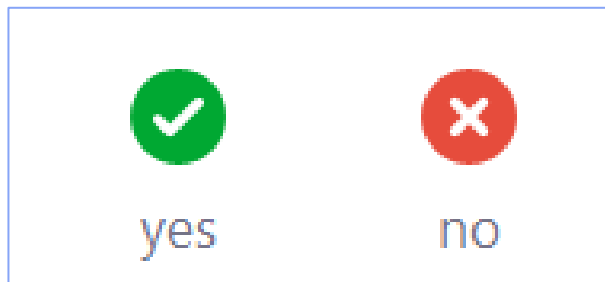
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What is **yellow** data?

- Restricted
- This class is used when it **could cause a certain damage** to the institution if the information becomes known to unauthorized persons.
- Documents that you don't want everyone else to read
- De-identified data where the key is locked away and stored safely away from the data
- Data sets containing minor amounts of non-sensitive personal data
- E-mail attachments that don't contain information that needs protection
- Unpublished research material
- Texts and pictures under copyright
- Examination answers and grades

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Question 2

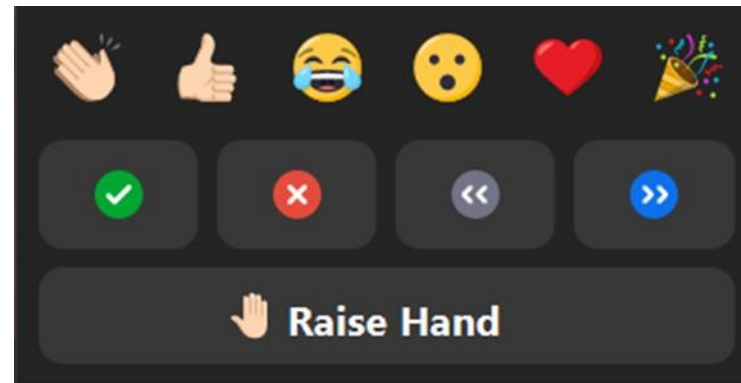Do you think you (will) work with **yellow** data?

What is **red** data?

- In confidence
- This class is used if it **could cause harm** to public interests, the university or individuals if the information becomes known to unauthorized persons.
- De-identified data where the key is available and stored with the data
- Special categories of personal data
- Personnel files
- Information relating to e.g. safety systems in buildings or IT systems
- Health related data

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Question 3

Do you think you (will) work with **red** data?

What is **black** data?


- Strictly in confidence
- This class is used if it **could cause significant harm** to public interests, the university or individuals if the information becomes known to unauthorized persons.
- Research data that requires extra protection
- Large quantities of sensitive personal data
- Large quantities of health related data
- Research data that is of great financial or commercial value

Question 4

Do you think you (will) work with **black** data?
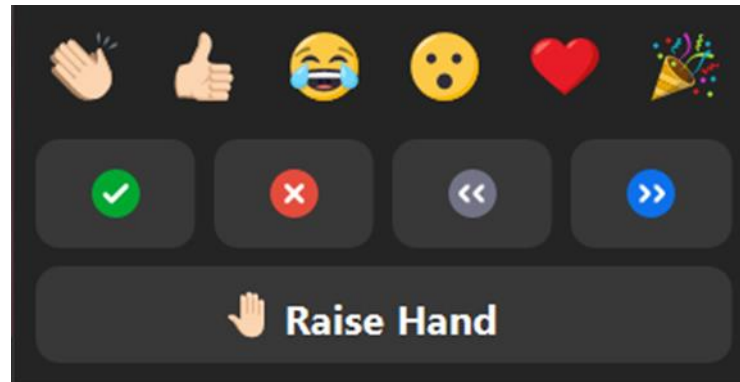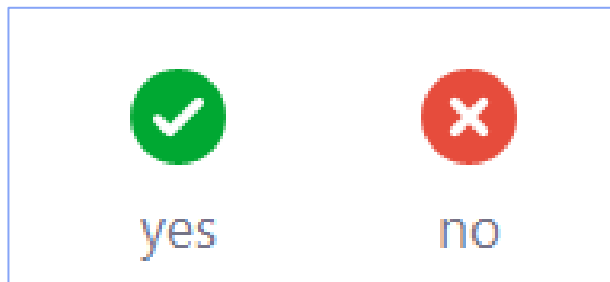
You must familiarise yourself and comply with the data processing guidelines.

Consult with your PI, local IT or USIT!

Questions?

STORAGE SELECTION

Question 5

Do you primarily use a private laptop or computer for your research?
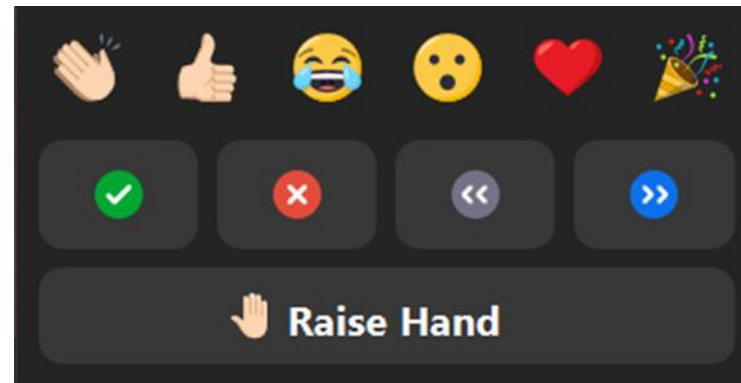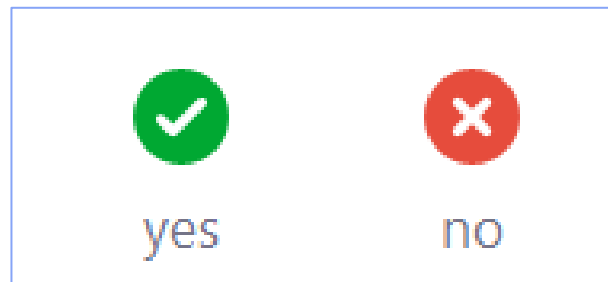
Where can you store the different types of data?

Data storage guide:

https://www.uio.no/english/services/it/security/lsis/storage-guide.html

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Where can you store the different types of data?

- **Green data**:

  - anywhere you want, but ideally **not only** on your private laptop (very vulnerable!)

Where can you store the different types of data?

- **Yellow data**:

  - Encrypted memory stick / external hard drive

  - Encrypted laptop maintained by UiO

  - UiO cloud solutions (UiO OneDrive, UiO G-Suite, …)

  - UiO TSD

  - UiO storage hotel («lagringshotell»)

  - UiO personal research storage

  - UiO e-mail; UiO Teams; UiO Zoom; UiO Nettskjema; UiO Canvas, UiO Vortex, UiO Wiki…

  - **Not** your private laptop, unless you comply with the [guidelines for use of private computer](#)

UiO commercial cloud solutions

- Microsoft Office365 + OneDrive

https://www.uio.no/english/services/it/store-collaborate/o365/

- Google Drive + Docs, Sheets, etc

https://www.uio.no/english/services/it/store-collaborate/gsuite/

Question 6

Aside *OneDrive & Office365* and *Google G-Suite* are you aware of any other commercial cloud solutions offered by UiO?

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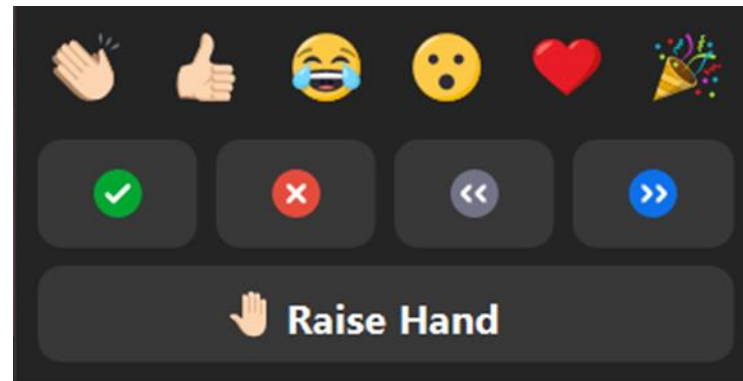
Where can you store the different types of data?

- **Red data**:

  - Fully encrypted disc, memory stick or external harddrive

  - Services for sensitive data – TSD

  - UiO Storage Hotel*

  - UiO Personal researcher storage*

  - UiO Vortex*

    *see Storage guide for details!

Source: https://www.uio.no/english/services/it/security/lsis/storage-guide.html

Where can you store the different types of data?

- **Black data:**

  Services for sensitive data – <u>TSD</u>

Question 7

Do you think you will be using TSD during your research time at UiO?

Educcloud Research

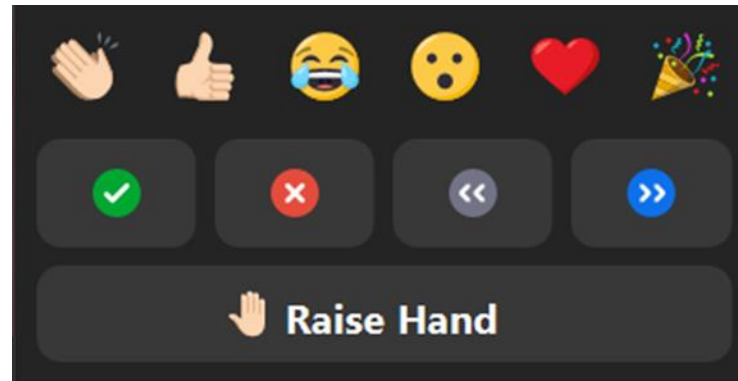= «TDS light»

-   New project-oriented self-service platform that gives easy and fast access to:

    -   A work environment for research projects that have cross institution and cross border users

    -   Storage that is available from anywhere, from any device and shared between project users and project platforms

    -   A low threshold HPC system that offers batch job submission and interactive nodes, and that has access to the same storage as the Windows and Linux resources available to the project

-   For **green**, **yellow** and **red** data

-   UiO projects will not be charged for the service in 2022

-   More information at: https://www.uio.no/english/services/it/research/platforms/edu-research/
    https://www.uio.no/english/services/it/research/platforms/edu-research/more/

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Choose one option

Request a new project

Only for project administrators and currently only available for users with a Norwegian electronic ID.

Go to Nettskjema

Apply for access to a project

Currently only available for users with a Norwegian electronic ID.

Log in (ID-porten)

Back

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Registrering av nytt prosjekt i Educloud Research

`0 %`

Obligatoriske felter er merket med stjerne *

Informasjon om deg som prosjektadministrator

Du som fyller ut dette er enten Principal Investigator (PI) i selve prosjektet eller har fått fullmakt fra PI. Oppgavene som prosjektadministrator skal utføre når prosjektet er registrert i EduCloud Research er innmelding og utmelding av brukere i prosjektet, endre rettigheter, utvide ytelser mm. Dersom du fyller ut dette skjemaet med fullmakt fra PI må du bruke din egen BankID

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EDUCLOUD RESEARCH

Sign in

Username

ec-user

Password   Forgot your password?

One time code   Need a new one time code?

Sign in

Do you not have an account yet?

Get started with Educloud

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Projects
1 project

Search projects..

Projects •

Support

⚙ Settings

⊕ Help

Name	Status	
ec32	Active	Select project

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Projects

Project

Users •

Fox users

Windows users

Desktop

Support

Settings

Help

Participants
2 participants

Search users..

Participants   Applicants

Name	Role	Status
Agata Bochynska	Admin	Active
ec-tsdfx	Admin	Active

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EDUCLOUD RESEARCH

ec32   ec-agatabo ⌄   ec-agatabo ⌄

Desktop
Connect to your virtual desktop

Available desktops

Projects

Project

Users

Fox users

Windows users

Desktop ●

Support

Settings

Help

Educloud VMware
Connect

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VMware Horizon

You can connect to your desktop and applications by using the VMware Horizon Client or through the browser.

The VMware Horizon Client offers better performance and features.

Install VMware Horizon Client

VMware Horizon HTML Access

○ Check here to skip this screen and always use HTML Access.

To see the full list of VMware Horizon Clients, click here.

For help with VMware Horizon, click here.

vmware

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VMware Horizon

Enter your Sentry user name and One-Time Code

Username

One-Time Code

Login

Cancel

Help with VMware Horizon

Privacy Policy

Download the Horizon Client for Windows (x64)
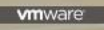
vmware

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Where can you find an overview of all cloud services at UiO that are evaluated or under consideration?

https://www.uio.no/tjenester/it/ny-tjeneste/vurderte_skytjenester.html
(in Norwegian)

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Upcoming sessions

Copyright and licensing

Mar. 15, 9:00 AM, Zoom

Sharing and archiving research data

Mar. 17, 9:00 AM, Zoom

Finding and reusing research data

Mar. 18, 9:00 AM, Zoom

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Menu

Digital Scholarship Center

UiO's Digital Scholarship Center (DSC) can help you take advantage of digital tools and methods in your research. We offer support with data management, visualization, digital research methods, and digital skill development.

Research Data Management at UiO

Having proper Research Data Management (RDM) routines will help you save time, enables sharing and reuse of data, and promotes open science. However, RDM in a digital context can be challenging and complex. We offer guidance and consultation on RDM topics including:

- data management plans (DMP)
- classification and storage
- organization, documentation, and metadata
- legal questions (i.e.privacy, copyright, and licensing)
- archiving and sharing

Digital research methods

On these pages you will find overviews and user guides on digital research methods for researchers and students. There will be information about relevant digital research methods in many subject areas.

Currently, we have information about text mining - or digital research methods for those working with text data.

Need advice?

Visit us at the room 230, in the 2nd floor of Niels Henrik Abels hus.

Book an appointment →

Or send us an email to research-data@uio.no

Digital scholarship communities

Interested in teaching or helping at workshops? Join us in:

→ Carpentries@UiO

→ CodeRefinery - Get Involved

Do you have any suggestions for workshops or seminars or questions about the workshops? Send an email to digitalscholarship@ub.uio.no

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Carpentry: Training on foundational coding and data science skills

Carpentry: Training on foundational coding and data science skills

At University of Oslo (UiO), Carpentries workshops based on Software Carpentry, Data Carpentry, and Library Carpentry lessons are offered to facilitate sharing and re-using of code and data among graduates and researchers from all faculties and units.

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https://www.ub.uio.no/english/courses-events/courses/other/Carpentry/

Open and reproducible research

More and more researchers across disciplines are preregistering their hypotheses, methods, and analysis plans before they collect or analyze the data to increase research transparency and visibility. This course will give an introduction to preregistration and a step-by-step guide on how to do it yourself.

Introduction to open and reproducible research

May 11, 9:00 AM, Zoom

Preregistration of research studies

May 13, 9:00 AM, Zoom

Preregistration on Open Science Framework (OSF)

May 19, 12:00 PM, Zoom

R Markdown: Writing Reproducible Research Papers with R

May 24, 9:00 AM, Undervisningsrom 1, 3rd floor Georg Sverdrups hus

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https://www.ub.uio.no/english/courses-events/courses/other/research-reproducibility/

OA-publishing and research visibility

Keep copyrights to your own work by publishing in Open Access journals. Find out your research impact. The course gives you practical support in publishing process and making your research visible.

OA-publishing and research visibility

Mar. 23, 9:00 AM, Zoom

OA-publishing and research visibility

Apr. 26, 9:00 AM, Zoom

https://www.ub.uio.no/english/courses-events/courses/other/medicine-publishing/

Open Science Lunch

Each last Thursday of the month at 12:00 we invite you to join us virtually for an online open lunch to hear about how to make your research more open. We will discuss research transparency and visibility, open publishing, data sharing, and more!

Upcoming

Time and place: Mar. 31, 2022 12:00 PM–1:00 PM, Zoom, Add to calendar

Open Science Lunch: Building and running a service for sharing curated research data

Learn about how data sharing services are built and run based on an example from EBRAINS Research Infrastructure.

Time and place: Apr. 28, 2022 12:00 PM–1:00 PM, Zoom, Add to calendar

Open Science Lunch: Open your research to the public

Learn about how you can conduct open science projects in the wild based on an example from MusicLab!

https://www.ub.uio.no/english/courses-events/events/open-science-lunch/

ReproducibiliTea

Journal Clubs

Our mailing list:
https://sympa.uio.no/uio.no/subscribe/open-science-oslo

University of Oslo

Welcome

Our journal club is open to both staff and students at UiO across all departments. Everyone is welcome to join us - whether you are an enthusiast, a skeptic, or a cautious explorer. Feel free to get in touch if you are interested to participate or contribute!

Our mission

- provide an informal and friendly platform for discussions about meta scientific topics
- help each other get familiarized with open science practices (e.g., pre-registrations, sharing data, sharing preprints, etc.)
- connect students and researchers from various disciplines who are interested in meta science.

Format

Before each meeting, we read an article on meta scientific topics, which we then discuss during the meeting. At each meeting, a different discussion leader will begin by providing a short overview of the paper and facilitate discussion throughout the meeting. Anyone can propose a possible paper or topic to present if we have not covered it already. Grab a cup of tea (coffee?) and join us! Due to the current pandemic, all sessions will be held online (Zoom) for the time being.

- Universitetet i Oslo
- osf.io/mvx54
- Z collection
- timo.b.roettger@gmail.com
- Timo B. Roettger
- Agata Bochynska

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Questions? Comments?

menti.com → code: 99 57 56 5

Thank you!

Contact us at:

research-data@uio.no