Fakultetsgemensam forskarutbildningskurs 2019
Faculty common course 2019

Kursnamn på svenska
Swedish course title
Vetenskaplig bästa praxis – Betydelsen av dokumentation

Kursnamn på engelska
English course title
Scientific Best Practice – The importance of documentation

Omfattning (högskolepoäng)
Higher education credits
2 HP

Undervisningsspråk
Language of instruction
English

Rekommenderade förkunskaper
Recommended prerequisites
None.

Kursens syfte och mål
General course objective/s and learning outcomes
The aim of this course it to highlight the importance of proper documentation of the research work and its justification in the context of the scientific practice, to provide an overview of the methodologies and technologies that can be employed to this aim and to allow the participants to share their experience and to guide them to the choice of the tools that better suit their research activity. The course is motivated by the need to provide the students with one of the most important tools in their career for dealing with their work results: i) traceability and reproducibility of the results, ii) intellectual property rights (authorship and patent applications), iii) proof against scientific misconduct. In particular, the course focus will be on the available digital documentation tools and on the software available for digital electronic notebooks, on the analysis of their advantages and limitations compared to the traditional paper logbook and how the two system can be better integrated.
At the end of the course the participant shall:
1. understand the role of proper scientific documentation in science and academia;
2. be able to discuss the role of logbook keeping within the broader context of the philosophy of science and the pedagogical background;
3. be able to properly design a logbok structure, layout and rules that work best for his/her particular field of research;
4. be able to use the available digital documentation tools;
5. be able to identify and evaluate the most appropriate electronic laboratory notebook;
6. be able to apply the methods discussed in the course to his/her work;
7. to evaluate and reflect on own previous methods for recording his/her own work.

Kursinnehåll
Course contents
Lectures on the theoretical and practical aspects of logbook keeping: key elements, role of the logbook in collaborative activities, the electronic logbook and its advantages and disadvantages with the traditional paper notebook, management of logbooks in research groups and institutions, from the logbook to the scientific publication.
Undervisning (kursens uppläggning)

Instruction (course structure)
Group discussions and reflection over intellectual property and ethical issues (study-case based) pertaining to scientific ownership and the role of the logbook. Discussion and review of participant own notes and logbooks and problems.

Examination

Assessment (form of examination)
The examination is based on: i) attendance to all lectures and group activities and discussions; ii) the individual electronic logbook produced during the course; iii) a short individual and personal reflection on the pre-course laboratory logbooks (if not available on the one written during the course) given as a short presentation.

Huvudansvarig institution

Department with main responsibility
Department of Physics and Astronomy

Kontaktperson/er (namn, e-postadress)

Contact person (name, e-mail address)
Marco Cecconello, marco.ceconello@physics.uu.se

Kurs datum/period

Course dates/period
Period 3/4

Antal platser

Maximum number of participants
30

Anmälan om antagning till kursen ska skickas till

Application for admission to the course is to be sent to
marco.ceconello@physics.uu.se

Skicka anmälan senast

Submit application not later than
4 weeks before the start of the course

Målgrupp/er (om möjligt, specifika ämnen/inriktningar)

Target group/s (specify, if possible, subject/specialization)
PhD students, PostDocs