

Scientific Communication and Information Retrieval, 3.0 credits

Vetenskaplig kommunikation och informationssökning, 3.0 hp

Third-cycle education course

8FO0105

Department of Health, Medicine and Caring Sciences

Valid from: First half-year 2024

Approved by
The Research and PhD studies
Committee

Approved
2018-11-26

Registration number
DNR LiU-2018-01722

Entry requirements

Entry requirement for studies on third-cycle education courses

- second-cycle degree,
- 240 credits in required courses, including at least 60 second-cycle credits,
or
- acquisition of equivalent knowledge in some other manner

Learning outcomes

By the end of the course the students will be able to:

Knowledge and understanding

- Understand how to communicate scientific results orally and in writing, to the research community and to the public
- Explain the principles and regulations regarding scientific co-authorship
- Describe the publishing process for scientific articles

Competence and skills

- In a strategic and independent way retrieve scientific information from relevant databases
- Produce a scientific poster and orally present it to an audience of researchers
- Critically review scientific articles/reports focusing on how methods and results are communicated

Judgement and approach

- Critically appraise own and others' research results, focusing on how these are communicated
- Value and relate to others' critical assessment of the student's research results
- Reflect on strategic choices for publishing and on the use of bibliometric measures

Contents

The course deals with the basics of scientific communication and information retrieval, based on the following areas:

- Structure, language and content of scientific articles
- Regulations and prerequisites for co-authorship, as well as the process of publishing, peer review and communication between author and journal editor
- The most important sources / databases for scientific information in medical science, approaches and strategies for successful, goal-oriented information retrieval from these, including practical exercises under supervision
- How to design a scientific poster and give an oral presentation, as well as approaches to visualize research results in graphs and figures
- How to communicate scientific results to the public
- Aspects of the application for research grants, what an application should contain and how to design it

Educational methods

The pedagogical approach applied at the Faculty of Medical and Health Sciences is student centered, problem based learning (PBL). The student takes responsibility for his/her own learning, and seeks and evaluates information and knowledge based on own queries and formulated problems. The role of the teacher is to guide and support the students.

Educational methods applied in this course are lectures, seminars, workshops and practical group sessions.

Examination

The examination consists of designing a scientific poster to be presented orally at a seminar, and also to critically review a poster presented by another course participant.

Article seminar and some group activities are compulsory, and active participation in those is mandatory to pass the course. Active participation means individual contribution in terms of activity, input and reflections of relevance to the topic in question. Absence from compulsory part is primarily supplemented by participation in the corresponding compulsory part during a later course opportunity.

Students who fail are offered one re-examination occasion in close connection to the course. After that participation in a coming course examination is offered. The reexamination should be equally comprehensive as the ordinary examination.

Grading

Two-grade scale

Course literature

A list of recommended literature will be provided by the course coordinator before the start of the course.

General information

The course is planned and carried out according to what is stated in this syllabus. Course evaluation, analysis and suggestions for improvement should be fed back to the Research and PhD studies Committee (FUN) by the course coordinator.

If the course is withdrawn or is subject to major changes, examination according to this syllabus is normally offered at three occasions within/in close connection to the two following semesters.