

## Faculty common course 2021

English course title:

Scientific Writing

Swedish course title:

Vetenskapligt skrivande

Extent (credits):

2 hp

Language of instruction:

English

Recommended prerequisites:

Anyone who has started PhD studies within the Faculty of Science and Technology of Uppsala University is expected to have the prerequisites required for the course.

Specify which learning outcomes of the doctoral degree that are addressed/covered (see appendix 1 of the call or the template of ISP). Describe how:

The aim is to make PhD students of the Faculty of Science and Technology aware of the importance of scientific writing and publishing and to give them interest, motivation and ability to publish well-written scientific papers in first-class scientific journals.

This is consistent with the outcome “visa förmåga att i såväl nationella som internationella sammanhang muntligt och skriftligt med auktoritet presentera och diskutera forskning och forskningsresultat i dialog med vetenskapssamhället och samhället i övrigt” in “Högskoleförordningen, bilaga 1. Examensordning (1993:100)”.

Course contents:

Aspects of scientific writing and publication that are essential for participants' PhD studies and future work are covered. *Lectures:* Introduction to scientific writing. Science and writing. Scientific publications. Scientific journals. Primary versus secondary. Subscription versus open access. Printed versus electronic. Impact factor. What results to publish? Why publish in a journal? Predatory journals. The *h* index. Structure and contents of a scientific paper. The IMRAD format. Title. Abstract. Introduction. Methods and materials. Results. Discussion. Acknowledgements. References and citations. Appendices. Figures. Highlights. Supplementary material. Language and style. Simple, straight and clear. Personal and impersonal. Present and past tense. Dangling participle. Abbreviations. Acronyms. Readability. Equations. The publication process. Co-authors, reviewers and editors. Preparing, submitting and revising a manuscript. Consistency. Conflict of interest. Responding to reviews. Correcting proofs. Ethics in publishing. Plagiarism. Duplicate submissions and

publications. *Group work*: Critical reviews of scientific journal papers from the perspective of the course. Presentations and discussions of group work.

**Instruction (course structure):**

The course will be given in traditional form or as a distance course depending on the health situation and recommendations. (In May 2020 it was given as a distance course and it is planned to be given as a distance course also in November 2020.)

Day 1: Lectures: Introduction to scientific writing. Structure and contents of a scientific paper.

Day 2: Lectures: Language and style of a scientific paper. The publication process. Ethics in science and publishing. Start of group work: review of scientific papers.

Day 3: Lectures: Diva, open access and related matters.

Days 4-8: Group work

Day 9: Presentations and discussions of group work

A booklet based on PP presentations will be given to the participants.

Teachers: Bengt Lundberg, Professor em, Division of Applied Mechanics, and a librarian from Uppsala University Library (in recent courses Christer Lagvik).

**Assessment (form of examination):**

Examination will be based on full and active participation in every part of the course: lectures, group work, and presentations and discussions of group work.

**Course examiner (name, e-mail):**

Professor Kristofer Gamstedt, [kristofer.gamstedt@angstrom.uu.se](mailto:kristofer.gamstedt@angstrom.uu.se)

**Department with main responsibility:**

Department of Materials Science and Engineering

**Contact person/s (course responsible teacher) (name, e-mail):**

Professor em Bengt Lundberg, The Ångström Laboratory, Box 35, 751 03 Uppsala.

E-mail: [bengt.lundberg@angstrom.uu.se](mailto:bengt.lundberg@angstrom.uu.se)

**Course dates/period:**

May and November 2021

**Maximum number of participants:**

40+40=80

**Submit the application for admission to:**

[bengt.lundberg@angstrom.uu.se](mailto:bengt.lundberg@angstrom.uu.se)

Submit the application not later than:

30 April and 31 October, respectively, 2021