English course title Writing and Reviewing in Life Science Engineering

Swedish course title Att skriva och granska manuskript inom teknik för livsvetenskaperna

Extent (credits) The course is given as 1.5 hp or 3 hp. The requirements for 1.5 hp and 3 hp are given in the “Assessment” section below.

Language of instruction English

Recommended prerequisites

The students should have enough results to start writing their own manuscript. Scientific writing course is not a prerequisite, but strongly recommended as a complement to this course.

General course objective/s and learning outcomes (Also specify which PhD examination goals that are addressed/covered. Describe how.)

The aim of the course is to give the students practice in manuscript writing, acquainted with the journal submission process and in reviewing articles. The purpose of the course is to be a practical complement to other scientific writing courses offered by the faculty. The students will get a wider perspective on biomaterial sciences in general as they contribute with their different experiences and approaches from their own research work.

In the course, the following PhD examination goals and activities are covered:

A1. Demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field.
   - The course brings together students with different backgrounds, and by this, the students will get familiar with reading and commenting on research from related research fields.

A2. Demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular.
   - The students will read about different methods in the field of biomaterial sciences and thereby increase their knowledge on research methodology in general. In particular, the students will get practise in how to critically asses the relevance of the methods used by reviewing the peers’ manuscripts.

B1. Demonstrate the capacity for scholarly analysis and synthesis as well as to review and assess new and complex phenomena, issues and situations autonomously and critically.
By reviewing the peer’s articles, the students will learn how to autonomously and critically assess other people’s work. This will also be beneficial for the students when planning and conducting their own research projects.

B4. Demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general.
   • The course will be a preparation for handling real reviewing processes after graduation. The students will learn how to phrase their comments in a professional way with high scientific quality.
   • By reading the peers’ manuscripts and improving their own manuscripts the students will get practice in how to present their results in a comprehensive manner and fulfilling the standards set by the academic community.

B5. Demonstrate the ability to identify the need for further knowledge.
   • In the course, the students will review articles about for them unfamiliar topics and methods. For the students to be able to judge on the scientific quality of these papers, they will have to practise their ability in identifying the need for new knowledge and how to obtain and analyse new information.

B6. Demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.
   • By learning on how to criticise researchers’ work in a constructive manner they will contribute to the learning process of others.

Course contents

The course covers the following aspects of writing and reviewing a manuscript: general paper structure, journal submission process, peer review process, journal selection criteria, cover letter writing, general structure of reviewers’ comments, writing and answering review comments with high scientific quality and professionalism.

Instruction (course structure)

The course lectures consist of one mandatory introductory lecture and several discussion sessions. The main focus lies on the writing of the students’ own manuscript(s) and cover letter(s), reviewing the peers’ manuscripts, and answering the peers’ review comments in a professional manner.

Assessment (form of examination)

The form of examination and the specific requirements are:

1.5 hp course version:
   • attend the introductory lecture
   • attend and actively participate in at least 2 discussion sessions
   • submit 1 own manuscript and cover letter for review, and respond to the peers’ review comments
• review 2 submitted manuscripts from the peer students
• writing and answering the review comments should be done in 2 weeks respectively

3 hp course version:
• attend the introductory lecture
• attend and actively participate in at least 3 discussion sessions
• submit 2 own manuscripts and cover letters for review, and respond to the peers’ review comments
• review 4 submitted manuscripts from the peer students
• writing and answering the review comments should be done in 2 weeks respectively

Course examiner (name, e-mail) Maria Tenje, maria.tenje@angstrom.uu.se, Cecilia Persson, cecilia.persson@angstrom.uu.se
Examinator (namn, e-post)

Department with main responsibility Department of Engineering Sciences
Huvudansvarig institution

Contact person/s (course responsible teacher) (name, e-mail) Hannah Pohlit, hannah.pohlit@angstrom.uu.se, Anna Fornell, anna.fornell@angstrom.uu.se
Kontaktperson/er (kursansvarig lärare) (namn, e-post)

Course dates/period The course starts both in the spring and autumn term with an introductory lecture. Each semester at least two individualised discussion sessions are given. The students do the article writing in their own pace, but the review process is limited to 2+2 weeks to avoid delay for the other students. The course is completed when the student has done all the tasks.
Kurs datum/period

Maximum number of participants 24
Antal platser

Submit the application for admission to Hannah Pohlit or Anna Fornell
Skicka anmälan till kursen till

Submit the application not later than 15th January and 15th August for the introductory lecture in the spring and autumn, respectively.
Skicka anmälan senast