

Syllabus

för kurs inom utbildning på
forskarnivå

Literature Review
Litteraturgenomgång

7,5 Högskolepoäng
7,5 ECTS credits

Course code:	FK40008
Valid from:	HT 2021
Established:	21-05-27
Department:	Department of physics
Subject:	Physics and theoretical physics.

Decision

This syllabus was adopted by the committee for education at graduate level 2021-05-27..

Prerequisites and special admittance requirements

Admitted to graduate level education

Learning outcome

The intention of this course is to train the PhD student in using the physics literature to get acquainted with a new research field. The course should also provide grounding for the student in an area relevant for his/her research. After the taking this course the student is expected to:

- Have acquired the skills to find articles in the physics literature and find and understand the relation between different articles.
- Have acquired the skills to read and connect different articles within a research area.
- Be able to compose a written overview of the current status of a specific research area, based on the reading of key articles.

Course content

The course consists of a literature research project. The extent of the work should correspond to 5 weeks of full time work (200 hours). The project should include the following activities:

1. The definition of the scope of the literature review. The subject of the literature review should be agreed with the PhD supervisor and fall within the broadly construed research area of the PhD project.
2. The reading of at least 10 key articles within the chosen subject area.
3. Making the connection between the articles read in order to achieve a summarising overview of the subject area. Generating an understanding of how the subject area fits into the broader research field.
4. Composition of a text which uses the material read to give an overview of the current status of the subject area, and how it has evolved.

Mandatory exams

None.

Compulsory components

All students participating in the course are expected to complete one problem set.

Forms of examination

The examination of this course is in the form of a written report which should describe the current status of the chosen subject area. It should also make clear which articles were read, and what they contributed to the development of the subject. The report should be accessible to a fellow physicist working in neighbouring field. It is not necessary to include the connection to the (scientific outcome of the) student's PhD project. The report should be between 8,000 and 12,000 words. This report should be submitted electronically by the PhD supervisor to the director of graduate studies, who will appoint an examiner among the faculty members. The examiner should be distinct from the supervisor, but may consult the supervisor where appropriate. The examiner should assess the report based on the following grading rubric:

- Context: does the report motivate the research area?
- Statement of scope: does the report define its scope, and delineate its boundaries?
- Coherence: does the report reflect a coherent choice of articles that explain the development of the subject?
- Presentation quality: is the report well-written and accessible to a physicist in a neighbouring field?

The examiner should mark these questions by “yes” or “no”. Reports marked with all yes are graded as “pass”. All other reports are graded as “fail”. The examiner should provide a short justification of the grade to the student. Students receiving the grade fail have the right to submit a corrected version of the report, following the recommendations of the examiner, who will thereupon reevaluate the report. Once failed reports should be resubmitted to the examiner within 2 months of receiving the grade. Twice failed reports result in a final grade of fail.

Form of instruction

The course is supervised by the PhD supervisor, and possibly assistant supervisor(s). The PhD supervisor should help define and agree on the scope of the literature review. Moreover, the supervisor(s) should provide help with the selection of the first few articles to be read. The supervisor(s) should also be available to discuss the content and direction of the review throughout the course. The course can be taken during the first two years of the PhD studies. The final report must be submitted to the director of graduate studies no more than 2 years after the starting date of the PhD. Reports graded as fail may be corrected after this date.

