



Faculty of Science

MAXA01, The Frontier of Science: a Research School at MAX-Lab, 7.5 credits

Vetenskapens frontlinjer, 7,5 högskolepoäng
First Cycle / Grundnivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2007-01-31 and was last revised on 2007-01-31. The revised syllabus applies from 2007-07-01, autumn semester 2007.

General Information

The course is an elective first-cycle component of a Bachelor of Science degree from the Faculty of Science. The course is also offered as a freestanding course.

Language of instruction: English

Main field of studies

Synchrotron Radiation Based Science

Depth of study relative to the degree requirements

G1N, First cycle, has only upper-secondary level entry requirements

Learning outcomes

The objective is that the students, on completion of the course, shall have acquired the following knowledge and skills.

The students are to gain insight into the conditions for science research. For a period of one year, the students will shadow a research group in its activities and thus gain an understanding of the group's work. They will also follow a research project from the planning stages to the implementation and publication of results. They shall be able to retrieve information from online journals and databases. Furthermore, they are to acquire practical skills in developing and presenting posters and giving PowerPoint presentations. The students are to participate actively in a seminar series in which prominent researchers describe a topical field of research. Each seminar is followed by a discussion between the researcher and the students.

Course content

The course is not divided into different components. For a period of two semesters, the students will shadow a research group working at MAX Laboratory. The students will meet with the research group once a week. Every other week, the students will participate in seminars, followed by one hour of discussion.

Course design

The teaching consists of seminars and project work. Participation is compulsory.

Assessment

The assessment is based on an oral presentation of a poster on completion of the first semester, and on a computer-based presentation on completion of the second semester. Students who fail an assessment will be offered another opportunity for assessment soon thereafter.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass.

For a grade of Pass on the whole course, the student must have participated actively in 75 per cent of the seminars and the project work in a research group with regular contact, approximately once a week. Furthermore, the student must have presented a project, in the form of a poster, after one semester of study, and a computer-based presentation after two semesters of study.

The final grade is determined by the level of participation in the seminar activities and project.

Students who wish to supplement their regular grade with ECTS grades must submit a request to the course director no later than one week after the start of the course.

Entry requirements

General requirements for university studies in Sweden

Subcourses in MAXA01, The Frontier of Science: a Research School at MAX-Lab

Applies from H07

0701 The Frontier of Science, 7,5 hp
Grading scale: Fail, Pass