

Syllabus

for course at advanced level

Astronomy, Degree Project

Astronomi, självständigt arbete

45.0 Higher Education

Credits

45.0 ECTS credits

Course code: AS9004
Valid from: Autumn 2019
Date of approval: 2016-03-07
Changed: 2016-03-07
Department Department of Astronomy

Main field: Astronomy
Specialisation: A2E - Second cycle, contains degree project for Master of Arts/Master of Science (120 credits)

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University on 2006-09-27

Prerequisites and special admittance requirements

To enter this course knowledge corresponding to a Bachelor's degree in physics, or similar, is required. In addition, knowledge similar to the courses Introduktion till galaxer och kosmologi, GN, 6hp (AS3001), Kosmologi, AN, 7,5hp (AS7009) and Stjärnornas struktur och utveckling, AN, 7,5hp (AS7020) is required. Furthermore, at least 15 HECs at advanced level are required. Also required is knowledge equivalent to Swedish upper secondary school course English B, or equivalent to one of the following tests; Cambridge CPE and CAE: Pass, IELTS: 6.0 (with no part of the test below 5.0), TOEFL (paper based): 550 (with minimum grade 4 on the written test part), TOEFL (computer based): 213, TOEFL (internet based): 79.

Course structure

Examination code	Name	Higher Education Credits
PROJ	Project	45

Course content

The course includes the following elements:

A project work under the supervision of a supervisor. The choice of subject is made together with the supervisor and the examiner. Key issues are plan, execute and report the scientific research. Furthermore, literature search is trained, as well as writing a report in English and to train oral presentation of science report.

Learning outcomes

It is expected that the student after taking the course will be able to:

- demonstrate insights in the methods and results of astronomical research
- search for and acquire astronomical literature
- have built a good foundation for further education in observational and theoretical branches of astronomy
- independently acquire knowledge and skills and evaluate these in connection to the chosen subject of the work.
- show good skills in presenting science results
- demonstrate an independent and scientific attitude where previously acquired astronomy/physics knowledge

will be used.

Education

The education consists of independent work under the supervision of a supervisor. The work should be presented orally as well as in a written report. The problem and the scientific background should be presented together with a summary of the relevant science literature. The Degree project includes participation in the science seminar series at the Institute of Astronomy. Participation in the practical laboratory work and group education associated with this is compulsory. An examiner may rule that a student is not obliged to participate in certain compulsory education if there are special grounds for this after consultation with the relevant teacher.

Forms of examination

a. Examination for the course is in the following manner: measurement of knowledge takes place through:

Written and/or oral presentations

b. Grading is carried out according to a 7-point scale related to learning objectives:

A = Excellent

B = Very Good

C = Good

D = Satisfactory

E = Sufficient

Fx = Fail

F = Fail

c. Grading criteria for the course will be distributed at the start of the course.

d. A minimum grade of E is required to pass the course, together with:
approved attendance at a seminar series on the concept of "scientific"

e. Students who fail to achieve a pass grade in an ordinary examination have the right to take at least further four examinations, as long as the course is given. The term "examination" here is used to denote also other compulsory elements of the course. Students who have achieved a pass grade on an examination may not retake this examination in order to attempt to achieve a higher grade. Students who have failed to reach a pass grade on two occasions have the right to request that a different teacher be appointed to set the grade of the course. A request for such appointment must be sent to the departmental board.

Interim

Students may request that the examination is carried out in accordance with this syllabus even after it has ceased to apply. This right is limited, however, to a maximum of three occasions during a two-year-period after the end of giving the course. A request for such examination must be sent to the departmental board.

Limitations

The course may not be included in the Masters program in Astronomy together with the courses

Självständigt arbete i astronomi, AN, 30hp (AS9001)

Självständigt arbete i astronomi, AN, 45hp (AS9002),

Självständigt arbete i astronomi, AN, 30hp (AS9003),

Examensarbete i astronomi, gk., 10p., AI1330, Examensarbete i astronomi, gk., 10p., AI3030, or

Examensarbete i astronomi, gk., 20p., AI3020.

Misc

The course is a component of the Master programme in Astronomy, and it can also be taken as an individual course.

Required reading

The literature is based on the science area of the work, and is compiled together with the teacher and possibly the examiner.