

**Faculty of Science** 

# ASTM42, Astronomy: Advanced Special Course, 15 credits

Astronomi: Fördjupningskurs, 15 högskolepoäng Second Cycle / Avancerad nivå

# Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2010-10-22 (N 2010/572) and was last revised on 2010-10-22. The revised syllabus comes into effect 2010-10-22 and is valid from the autumn semester 2012.

#### General information

The course is included in the main field of physics and astrophysics at the Faculty of Science and is offered by the Department of Astronomy and Theoretical Physics. It is an elective second-cycle component of a degree of Master of Science (120 credits) in Astrophysics.

Language of instruction: Swedish and English

Main field of

study

Specialisation

Physics A1N, Second cycle, has only first-cycle course/s as entry

requirements

Astrophysics A1N, Second cycle, has only first-cycle course/s as entry

requirements

## Learning outcomes

The objective is that the students, on completion of the course, shall have acquired specialised knowledge of a limited area of expertise within astrophysics.

### Knowledge and understanding

On completion of the course, the students shall be able to

- account for the principal investigation methods in the area
- describe in detail the basic theoretical foundation of the area

## Competence and skills

On completion of the course, the students shall be able to

- compile and present a report at the levels of both science and popular science
- seek and understand scientific literature

### Judgement and approach

On completion of the course, the students shall be able to

• critically assess different methods and hypotheses

#### Course content

The course deals with a specific area of astrophysics, the approach to and content of which is to be determined in consultation with the lecturer in charge of the assessment. The approach can be observational, experimental or theoretical.

## Course design

The teaching consists of text study and supervision. Exercises in observation or experimentation may be included.

#### Assessment

The assessment is based partly on a presentation of a minor written report and an oral popular science version of the report, and partly on an exam at the end of the course.

Students who fail an assessment will be offered another opportunity for assessment soon thereafter.

#### Grades

Grading scale includes the grades: Fail, Pass, Pass with distinction For a grade of Pass on the whole course, the student must have passed the exam and the report. The only grades awarded for the report and oral presentation are Pass or Fail. The final grade is determined by the exam.

## Entry requirements

To be admitted to the course, students must have passed 90 credits of science courses, in which knowledge equivalent of FYSA31 (Physics 3, Modern Physics), 30 credits, must be included.

### Further information

The course may not be included in a degree together with AST262 Special Course II, 15 credits.