



Faculty of Science

## **ASTA03, Astronomy: Basic Astronomy - Introductory course in astronomy, 7.5 credits**

*Astronomi: Astronomins grunder - orienteringskurs i astronomi, 7,5  
högskolepoäng*  
First Cycle / Grundnivå

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### **Details of approval**

The syllabus was approved by Study programmes board, Faculty of Science on 2008-06-11 and was last revised on 2021-06-10. The revised syllabus applies from 2021-06-10, autumn semester 2021.

### **General Information**

The course is included in the main field of physics at the Faculty of Science and is offered by the Department of Astronomy and Theoretical Physics.

*Language of instruction:* Swedish

*Main field of studies*

Physics

*Depth of study relative to the degree  
requirements*

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

### **Learning outcomes**

The overall objective of the course is to, at a general level, give the student basic knowledge of modern astronomy.

### **Knowledge and understanding**

After completion of the course, the students shall be able to at a general level:

- describe the night sky and its daily and annual changes
- describe the solar system and its components
- describe the general properties of the Milky Way and other galaxies
- explain the properties and evolution of stars

- explain the origin and evolution of the universe
- describe astronomical telescopes and methods of observation

### **Competence and skills**

After completion of the course, the students shall be able to:

- observe the night sky and astronomical objects with and without a telescope

### **Course content**

The course is an introductory course in modern astronomy. The components included are:

- the night sky and its movements
- concepts of time
- astronomical telescopes and methods of observation
- the distance to stars and their movements in space
- the sun and the solar system
- the life cycle of stars
- the Milky Way and other galaxies
- general properties of the universe

### **Course design**

The teaching consists of lectures, hand-in exercises, demonstrations and observation exercises. The hand-in exercises are mandatory and the participation in observation exercises and demonstrations is compulsory.

### **Assessment**

The assessment is done in the form of a written report and a written exam at the end of the course, as well as through passed hand-in exercises during the course and participation in all other compulsory components.

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

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

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

### **Grades**

Marking scale: Fail, Pass, Pass with distinction.

For the grade Pass on the whole course, the student must have passed the exam, the written report and the hand-in exercises as well as participated in all the compulsory components.

The grading scale for the report and the written exam is Fail, Pass, Pass with distinction. The grading scale for the hand-in exercises as well as the demonstrations and observation exercises is Fail, Pass.

The final grade on the course is decided by the weighted average of the grades on the written exam and the report with the weights 4 and 1 respectively, where each part is graded on the scale 1-100 with 50 being required for Pass and 75 for Pass with distinction.

## **Entry requirements**

General requirements for university studies in Sweden

## **Further information**

The course may not be included in a degree together with ASTA01 Introductory Course, 7.5 credits, ASTA11 Astronomy and Astrophysics, 15 credits, or ASTB01 Introduction to Astrophysics, 7.5 credits.

## Subcourses in ASTA03, Astronomy: Basic Astronomy - Introductory course in astronomy

Applies from H21

- 2101 Written exam, 4,0 hp  
Grading scale: Fail, Pass, Pass with distinction
- 2102 Hand-in exercises, 1,0 hp  
Grading scale: Fail, Pass
- 2103 Demonstrations and Observation exercises, 1,5 hp  
Grading scale: Fail, Pass
- 2104 Written report, 1,0 hp  
Grading scale: Fail, Pass, Pass with distinction

Applies from H13

- 1301 Basic Astronomy, 4,5 hp  
Grading scale: Fail, Pass, Pass with distinction
- 1302 Exercise, 1,0 hp  
Grading scale: Fail, Pass
- 1303 Demonstration and Observation Package, 2,0 hp  
Grading scale: Fail, Pass