



# SH2403 Astrophysics, Advanced Course 6.0 credits

Astrofysik, fortsättningskurs

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for SH2403 valid from Autumn 2007

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Physics

## Specific prerequisites

Recommended prerequisites: Previous knowledge in astrophysics and of mathematical methods in physics and quantum physics.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

The student should have obtained a broad overview of the radiation processes and radiation transport. The student should understand how line spectra and continuum spectra are created and have good knowledge of compact objects. The knowledge should be a preparation for further studies in astrophysics as well as teaching purposes.

## Course contents

Radiation transport, line spectra, continuum spectra, compact objects.

## Course literature

Carroll & Ostlie: Introduction to Modern Astrophysics.

## Examination

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

## Other requirements for final grade

One written exam (TEN1; 4hp)  
Hand-in exercises (2hp)

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.