

**SYLLABUS**

# **Physics for Poets 7.5 credits F0022T**

**Universum för nyfikna**

**Course syllabus admitted: Autumn 2023 Sp 1 - Present**

**DECISION DATE  
2021-02-17**

# Physics for Poets 7.5 credits F0022T

## Universum för nyfikna

### First cycle, F0022T

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	G U 3 4 5	Fysik	Physics

## Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language

## Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

## Course Aim

The course aims to give curious "non-experts" knowledge about the revolutionary discoveries in physics. A background in the natural sciences is not necessary. The focus in the course lies on understanding the underlying ideas ( which often are simple, deep and beautiful) and not on exact mathematical calculations.

## Contents

1. A Vast and Most Excellent Science 2. Toward a Science of Mechanics 3. The Denoument: Newton's Laws 4. The Moon and the Apple 5. The Romance of Energy 6. One last Part for the Machine 7. Waves 8. Does the Earth Really Move? 9. The Birth of Relativity 10. The Wedding of Space and Time 11.  $E=mc^2$  and All That 12. Did God Have any Choice 13. The Atom Returns 14. Rutherford Probes the Atom 15. The Atom and the Quantum 16. Particles and Waves 17. Does God Play Dice? 18. Schrödinger's Cat 19. The Dreams Stuff Is Made of 20. The whole Shebang

## Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures and demonstrations

## Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. Hand- in problems.

## Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

## Overlap

The course F0022T is equal to MTF308

## Course offered by

Department of Engineering Sciences and Mathematics

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0002	Assignments	G U 3 4 5	7.5	Mandatory	A13	

## Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

## Last revised

by Head Faculty Programme Director Niklas Lehto 2021-02-17

## Syllabus established

The syllabus was established by the Department of Applied Physics and Mechanical Engineering 2007-02-28, and remains valid from autumn 2007.