Faculty of Technology and Science
Physics

Syllabus

Course Approval
The syllabus was approved by the Faculty Board of Technology and Science on 8 February 2012 , and is valid from the Spring semester of 2012 at Karlstad University. It replaces the former syllabus approved on 28 May 2009, Reg No: FAK2 2009/53:16.

Course Code: FYGC05
Physics, Bachelor Degree Project, 15 ECTS Credits
(Fysik, examensarbete kandidatnivå, 15 Swedish credit points)
Degree Level: Bachelor
Progressive Specialisation: G2E (First cycle, has at least 60 credits in first-cycle course/s as entry requirements, contains degree proj. for B.A./B.Sc.)

Language of Instruction
English or Swedish

Prerequisites
At least 75 ECTS Credits in Physics and 60 ECTS Credits in Mathematics, or the equivalent.

Major Field of Study
FYA (Physics)

Learning Outcomes

The aim of the course is to provide a specialized conclusion to the Bachelor-level studies in Physics, in which students independently carry out an investigative science project in a chosen area.

Upon completion of the course, students should be able to:
- give an account of the scientific basis of physics, especially of specialized parts of the theories, methods and applications in the chosen subarea, as well as of some current research issues in that area,
- independently identify, formulate and solve problems and complete tasks in a project within given time limits,
- give an account of and discuss information, problems and solutions orally and in writing in a scientific manner,
- search for and collect relevant information, critically evaluate its reliability and quality, and interpret and reference it correctly,
- evaluate and critically review the obtained results in relation to the scientific literature,
- make considered judgements on relevant social and ethical aspects in the chosen subarea and demonstrate insight into the potentials and limitations of science, its role in society and our responsibility for how it is used.

Content and Form of Instruction

The degree project is carried out under supervision within a specialized area of Materials Physics, Theoretical Physics or Physics Education.

Reading List

See separate document.

Examination

Assessment is based on the following mandatory thesis components: problem formulation, implementation, individually written report and oral presentation. The written report should be in Swedish or English. Reports written in English should have a title and a summary in English.

Grades

One of the grades Fail (U), Pass (G), or Distinction (VG) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.

Revised on 26 January 2012 and valid from the spring semester of 2012.

Karlstads universitet 651 88 Karlstad, Sweden
Tel +46-54-700 10 00 Fax +46-54-700 14 60
information@kau.se www.kau.se