

PHYSICS

FYD400 Programming in C-language Part I, 7.5 higher education credits

C-programmering I, 7,5 högskolepoäng *First Cycle*

Confirmation

This course syllabus was confirmed by Department of Physics on 2007-06-15 to be valid from 2007-07-01.

Field of education: Science 100% *Department:* Physics

Position in the educational system

Advanced course in the main subject physics. The course is given as part of the programme Computer-aided physical measuring techniques and as a freestanding course at University of Gothenburg. This course replaces course FY0330 and both FY0330 and FYD400 may not be included in a degree.

The course can be part of the following programmes: 1) No translation available (NDFMH) and 2) Computer Aided Measurements in Physics (N1DAF)

Main field of studies	Specialization
Physics	G1N, First Cycle, has only upper-
	secondary level entry requirements

Entry requirements

General entry requirements as well as basic computer knowledge.

Learning outcomes

The aim of the course is that the student should acquire knowledge in programming of modern measurement systems as well as the structure of these. After having gone through the course "C programming I" the student should:

- be able to write simple programs in C to handle and control modern measurement systems.
- be able to handle in and output signals in simple measurement systems.
- have a basic understanding of good program structure and debugging of programs in C.
- have obtained a basis for advanced studies in programming of measurement system.

Course content

The teaching is given in the form of lectures and laboratory sessions. The student utilises C to develop Windows based measurement applications as well as analysis programs for measurement data. The student will also acquire knowledge in dynamically linked libraries (DLLs) as well as code interface to LabVIEW, e. t. c.

Form of teaching

For examination, it is required that all laboratory sessions are implemented and passed as well as that a final assignment is carried out and is presented.

Language of instruction: Swedish

Assessment

Depending on the degree of difficulty of the final assignment and submitted exercises, the grade Pass is given or Passed with distinction.

A student who has failed a test twice has the right to change examiner, unless weighty argument can be adduced.

Grades

The grading scale comprises: Fail (U), Pass (G), Pass with Distinction (VG). Report to course coordinator no later than a week after start of the course if ECTS grade is required.

Course evaluation

Course evaluation is carried out by students and teachers during the course as well as at the end of the course.