



Faculty of Health, Science and Technology
Computer Science

Syllabus

Introduction to Programming for Teachers

Course Code: DVGA22
Course Title: Introduction to Programming for Teachers
Introduktion till programmering för lärare
Credits: 5
Degree Level: Undergraduate level
Progressive Specialisation: First cycle, has only upper-secondary level entry requirements (G1N)

Major Field of Study:
DVA (Computer Science)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2018-08-30, and is valid from the Spring semester 2019 at Karlstad University.

Prerequisites

General admission requirements and upper second level Mathematics 3/C, or equivalent

Learning Outcomes

Upon conclusion of the course, students should be able to:

- describe, use and teach basic concepts in programming,
- create programs, troubleshoot, test and improve program code.

Content

- Basic concepts and building-blocks in programming (including sequence, alternative, condition, iteration and functions)
- Algorithmic thinking and problem-solving with the help of programming
- Programming in at least two programming languages
- Programming skills such as creating, testing and trouble shooting program code, along with reading and improving existing program code
- Practice in handling and processing data sets
- Briefing on applying programming in the subject of mathematics in accordance with national curricula.

Reading List

See separate document.

Examination

Assessment is individual and in the form of hand-in assignments and oral presentation.

Grades

One of the grades Distinction (VG), Pass (G), or Fail (U) 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 evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

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