



COURSE SYLLABUS

Foundations of Programming, 7.5 credits

Grundläggande programmering, 7,5 högskolepoäng

Course Code: TGPK12	Education Cycle: First-cycle level
Confirmed by: Dean Oct 22, 2021	Disciplinary domain: Technology
Revised by: Director of Education Jun 1, 2022	Subject group: IF1
Valid From: Jan 1, 2023	Specialised in: G1F
Version: 3	Main field of study: Informatics

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding

- display knowledge and understanding of basic concepts of programming like variables, data types, iterations, conditional statements and functions
- display knowledge of core concepts of object-orientation
- show familiarity with the possibilities, limitations and current uses of JavaScript
- demonstrate comprehension of the relationship between JavaScript, HTML and CSS

Skills and abilities

- demonstrate the ability to troubleshoot and identify basic programming errors
- demonstrate the ability to autonomously solve a given problem and choose a suitable method

Contents

The course includes modules giving theoretical as well as practical skills for developing modern web applications:

The course includes the following elements:

- JavaScript, object-oriented programming
- Manipulating HTML and Document Object Model
- Event-driven programming

Type of instruction

Lectures, workshops and assignments.

The teaching is conducted in English.

Prerequisites

General entry requirements and completed course Web and User Interface Design, 15 credits (or the equivalent).

Examination and grades

The course is graded 5,4,3 or Fail.

Registration of examination:

Name of the Test	Value	Grading
Project work ¹	5 credits	5/4/3/U
Laboratory assignments	2.5 credits	U/G

¹ Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

The literature list for the course will be provided 8 weeks before the course starts.

Author: Freeman, E & Robson, E

Title: Head first JavaScript programming

Publisher: O'Reilly Media

ISBN: 9781449340131