JÖNKÖPING UNIVERSITY
School of Engineering

COURSE SYLLABUS
Introduction to Script Programming, 7.5 credits

Skriptprogrammering, 7,5 högskolepoäng

Course Code:	TSPG17	**Education Cycle:**	First-cycle level
Confirmed by:	Dean Feb 1, 2017	**Disciplinary domain:**	Technology (95%) and social sciences (5%)
Revised by:	Director of Education Aug 6, 2024	**Subject group:**	TE9
Valid From:	Oct 21, 2024	**Specialised in:**	G1N
Version:	4	**Main field of study:**	Informatics

Intended Learning Outcomes (ILO)

On completion of the course, the student shall

Knowledge and understanding
- display knowledge of how a programming language interacts with the operating system and the underlying hardware
- display knowledge about integrated development environments and their usage area
- display knowledge of common terms and concepts in script programming

Skills and abilities
- demonstrate the ability to use common data types and controls structures in a high-level programming language
- demonstrate the ability to create interactive console programs in a high-level programming language
- demonstrate the ability to develop and implement simple programs and algorithms in a high-level programming language
- demonstrate the ability to use script programming to create, read and modify files of different types in a high-level programming language

Contents

The course starts with the foundations of imperative programming. A high-level programming language will be used to exemplify these concepts. In the beginning of the course the focus will be on creating simple console programs. The focus will then be to develop and implement algorithms to solve different problems.

The course includes the following elements:
- The foundation of imperative programming
- Integrated Development Environments (IDE)
- Program syntax in a high-level programming language
- The foundations of a programming language
- Creation of algorithms
- Console programs (input and output)

- Usage of different data formats in programming, e.g. XML, JSON, CSV

Type of instruction

Instruction consists of lectures and laboratory work.

The teaching is conducted in English.

Prerequisites

General entry requirements and Mathematics 2a or 2b or 2c. Or: Mathematics B and English A (or the equivalent).

Examination and grades

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

Registration of examination:

Name of the Test	Value	Grading
Examination[I]	3 credits	5/4/3/U
Laboratory work	4.5 credits	U/G

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

Course literature

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

Title: How to Think Like a Computer Scientist: Learning with Python
Author: Allen Downey, Jeffrey Elkner and Chris Meyers
Publisher: Unknown
ISBN-13: 978-0971677500
ISBN-10: 0971677506

(Available free at http://interactivepython.org/runestone/static/thinkcspy/index.html)