

Course

CS-A1110

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For the reader

Tervetuloa Ohjelmointi 1 -kurssille!

Tämä on **oppimisympäristö A+**, jota käytämme **O1**:n eli Ohjelmointi 1 -kurssin ja sen avoimen verkkoversion tarjoamiseen. Löydät täältä kurssin oppimateriaalin harjoitustehtävineen. Heti tuossa alla on uutispalsta ja sisällysluettelo; kurssin esittely löytyy materiaalin ensimmäisestä luvusta. Vasemmalla valikossa on muuta hyödyllistä.

Jos osaat suomea mutta A+ näkyy sinulla englanninkielisenä, vaihda kieltä -nappulalla vasemman reunan valikon yläosassa.

Welcome to Programming 1!

This is the **A+ course platform** that we use to run the course Programming 1, better known as **O1**. The course is open not only to Aalto University's own students but to anyone. You'll find all the course materials and assignments here in A+. There is a section for announcements immediately below. Further down, you'll find our table of contents; there's an introduction in the first chapter. The menu on the left has links to other useful pages.

If you're doing O1 in English, but A+ shows up in Finnish, please change languages with the -button near the top of the menu on the left.

Course news

Summary of end-of-course feedback

Thursday, 21 December 2023, 12:05

We've published a summary of the course feedback that we received. Thank you for answering the questionnaire and taking part in O1!

(If you didn't answer the questionnaire yet, chop chop! We'll accept and read late feedback, too.)

Remember the end-of-course questionnaire! And the last bulletin!

Friday, 8 December 2023, 17:54

The last bulletin is in Chapter 13.0. You'll also a link there that will take you to the assistants' favorite text-adventure games (once those are published, within a few days' time).

The course feedback questionnaire is now open in Chapter 13.1. It is a mandatory component of O1. The official deadline is Wednesday, Dec 13th, but you might just as well fill in it right now, right?

Enjoy the holidays and happy programming!

Week 12

Thursday, 30 November 2023, 12:42

The newest bulletin is in Chapter 12.0. The last regular deadline is in one week: December 6th at six. **Note that Dec 6th is Finnish Independence Day, so there's no teaching at Aalto then. Try to submit early!**

Show older

Week 1

Monday, 28 August 2023, 12:00 – Wednesday, 13 September 2023, 18:00

- Chapter 1.1: Introduction to O1
- Chapter 1.2: Introduction to Programming
- Chapter 1.3: Numbers, Words, Sounds, and Pictures
- Chapter 1.4: Storing Values in Variables
- Chapter 1.5: Collections and References
- Chapter 1.6: Using Subprograms
- Chapter 1.7: Creating Custom Functions
- Chapter 1.8: Functions, Types, and Errors

Week 2

Monday, 28 August 2023, 12:00 – Wednesday, 20 September 2023, 18:00

- Chapter 2.0: Weekly Bulletin
- Chapter 2.1: Object-Oriented Programming
- Chapter 2.2: Inside an Object
- Chapter 2.3: Classes of Objects
- Chapter 2.4: Inside a Class
- Chapter 2.5: Pictures and Positions
- Chapter 2.6: Many Ways to Use a Variable
- Chapter 2.7: A Complete Scala Application

Week 3

Monday, 28 August 2023, 12:00 – Wednesday, 27 September 2023, 18:00

- Chapter 3.0: Weekly Bulletin
- Chapter 3.1: Interactive Graphics
- Chapter 3.2: Interfaces and Documentation
- Chapter 3.3: Experiences and Truths
- Chapter 3.4: Decisions
- Chapter 3.5: Soda, Football, and Errors
- Chapter 3.6: Decisions, Decisions

Week 4

Monday, 28 August 2023, 12:00 – Wednesday, 4 October 2023, 18:00

- Chapter 4.0: Weekly Bulletin
- Chapter 4.1: Driving Practice
- Chapter 4.2: Containers — and a Program that Crashes
- Chapter 4.3: A Lack of Values
- Chapter 4.4: Exercises in Not Existing

Week 5

Monday, 28 August 2023, 12:00 – Wednesday, 11 October 2023, 18:00

- Chapter 5.0: Weekly Bulletin
- Chapter 5.1: Logic, Blood, and Shopping
- Chapter 5.2: Objects Everywhere
- Chapter 5.3: Objects as Functions, Classes as Objects
- Chapter 5.4: Inside the Scala Toolkit
- Chapter 5.5: Looping through Elements
- Chapter 5.6: Loops, Strings, and Elections

Week 6

Monday, 28 August 2023, 12:00 – Wednesday, 18 October 2023, 18:00

- Chapter 6.0: Weekly Bulletin
- Chapter 6.1: Functions as Parameters
- Chapter 6.2: Anonymous Functions
- Chapter 6.3: Collections and Snakes

Week 7

Monday, 28 August 2023, 12:00 – Wednesday, 25 October 2023, 18:00

- Chapter 7.0: Weekly Bulletin
- Chapter 7.1: More Collections, More Programs
- Chapter 7.2: Laziness and Untold Repetitions
- Chapter 7.3: Traits and Type Hierarchies
- Chapter 7.4: Sealed Types and Enumerations
- Chapter 7.5: Superclasses and Subclasses

Week 8

Monday, 28 August 2023, 12:00 – Wednesday, 1 November 2023, 18:00

- Chapter 8.0: Weekly Bulletin
- Chapter 8.1: A Game of Glasses
- Chapter 8.2: City Simulator
- Chapter 8.3: Robots
- Chapter 8.4: Robots and Options

Week 9

Monday, 28 August 2023, 12:00 – Wednesday, 8 November 2023, 18:00

- Chapter 9.0: Weekly Bulletin
- Chapter 9.1: Robots and Conditional Looping
- Chapter 9.2: Pairs and Maps
- Chapter 9.3: Interactive Fiction and Code Quality

Week 10

Monday, 28 August 2023, 12:00 – Wednesday, 15 November 2023, 18:00

- Chapter 10.0: Weekly Bulletin
- Chapter 10.1: Comparing, Sorting, and Grouping
- Chapter 10.2: Peeveli
- Chapter 10.3: Robots That Compete

Week 11

Monday, 28 August 2023, 12:00 – Wednesday, 29 November 2023, 18:00

- Chapter 11.0: Weekly Bulletin
- Chapter 11.1: Your Text Adventure
- Chapter 11.2: Programming Paradigms
- Chapter 11.3: An Introduction to File I/O

Week 12

Monday, 28 August 2023, 12:00 – Wednesday, 6 December 2023, 18:00

- Chapter 12.0: Weekly Bulletin
- Chapter 12.1: Arrays and a Faulty Train
- Chapter 12.2: Recursion
- Chapter 12.3: Robot Tournament
- Chapter 12.4: GUIs with the Swing Library

Week 13

Monday, 28 August 2023, 12:00 – Wednesday, 31 January 2024, 23:59

- Chapter 13.0: O1 Ends
- Chapter 13.1: Course-End Feedback

Supplementary Pages

Monday, 28 August 2023, 12:00 – Friday, 1 March 2024, 12:00