

course beginning: spring spring

subject catalogue S23 K24

course code KOE511

name of course

Audio Programming Language II

specification

elective for BA and MA level

academic instructor

T.Johannes

prerequisite course

KOE510 Audio programming language I

no of terms

1

contact hr/total

30.0

hr/term

30.0

hr/week

0.0

ECTS/total

3.00

Lect

0.0

Grp

30.0

Ind

0.0

Sem

0.0

Pract

0.0

graded or pass/fail exams

A

term

1

ECTS

3.00

aim of the subject

To develop and extend understanding about programming sound synthesis using open source software Csound; to learn basics about writing a web based audio application (using javascript).

Minimal required size of group: 4 students

Prerequisite subject KOE510 Audio programming language I OR independently acquired knowledge about basics of Csound and simple sound synthesis principles)

content

The course uses open source, free, cross-platform software Csound (<http://csound.github.io>) as its learning bases. The course is practical - the students write small Csound programs based on examples and hints by the tutor, the theory is explained side by side with the practical work.

Main topics:

1. Refresh of Csound basics
2. Recursive structures, self-recurring instruments
3. Tables and memory management
4. Functions and user defined opcodes
5. Introduction to creating web based audio application (Csound + javascript)

learning outcomes

On completion of the subject the student:

- is able to write a short piece (2..3 minutes) in Csound
- knows the basics of creating a web based audio application
- can find helping information, use the manual and front-end CsoundQt

assessment

Non-differentiated assessment. The precondition for assessment is participation in at least 60% of academic work and presented piece written in Csound.

assessment criteria

- presented piece (2..3 minutes) written in Csound that implements at least two of the introduced principles
- skills of obtaining helping information
- participation of at least 60% of the lectures.

course reading material

Materials and examples compiled by tutor; Manual of Csound, Csound FLOSS manual; Lazzarini, Yi, Ffitch, et al „Csound – A Sound and Music Computing System”, Javascript Fundamentals (<https://javascript.info/first-steps>)

T.Johannes