

**Danish School of Media and Journalism**  
**Visual Communication/Graphic Design**  
**Creative Code**  
**Spring 2023, 4th semester**  
**5 ECTS**

**Aims:**

Ability to apply code as a creative means for design of visual concepts.  
Basic understanding of the programming language Processing/P5.js and the associated programmatic principles.

**Pedagogical and didactical approach:**

The student learns to link theoretical reflection with actions in practice, as well as to reflect on and apply relevant theory and knowledge. This is done in order to be able to justify and qualify one's actions in professional practice. The learning activities are based on the following fundamental Reflective Practice-based Learning principles:

- No. 1: The students' own experiences are incorporated into teaching and learning activities
- No. 2: Teaching and learning activities designed to include appropriate disturbances
- No. 3: Teaching and learning activities are organized as exploration
- No. 4: The content of teaching and learning activities is based on the good example
- No. 5: Lecturers and students work together on learning processes
- No. 6: Lecturers and students create room for dialogue

**Working methods:**

The course is a combination of lectures, live coding sessions, tutorials, group work, peer feedback and assignments. Assignments and projects are worked on individually or in groups. During the course, importance is placed on analysis and reflection on feedback on the student's own as well as other students' products and process.

15.11.2023

Side 1 / 3

**Learning outcomes:**

The students will obtain the following during the course:

Knowledge and understanding:

- Overview of the field: History of creative coding and how it impacts the evolution of graphic design as a practice.
- Understanding of programming related to the aesthetic quality of a graphic design product and vice versa.
- Understanding of programming applied to extend visual/graphic ideas into self-contained interactive design systems capable of producing multiple variants of an original visual/graphic form.

Skills:

- Basic coding skills, file handling and use of libraries in the Processing language.
- Ability to conceive, describe, plan and code self-contained design systems.

Competences:

- Hands-on experience with coding as a creative means.
- Ability to work with mathematics, logic and structured thinking.
- Ability to independently seek coded solutions to identified problems.

**Literature, compulsory:**

- Reas, C. & Fry, B. (2015) Getting Started With Processing – A Hands-On Introduction (2nd Edition), Maker Media Inc
- Hartelius, A.M: Compendium with step-by-step introduction to the PDE, basic geometric figures and attributes, transformations, functions, variables, algorithms, loops and conditions, import and export of vector graphics, interactive events, arrays, matrices and OOP.

**Literature, optional:**

- Shiffman, D. (2015), Learning Processing (2nd Edition), Morgan Kaufmann
- Shiffman, D. (online), The Nature Of Code, Self-published, accessible via <http://www.natureofcode.com>
- Lauren McCarthy: Getting Started with p5.js - Making Interactive Graphics in JavaScript and Processing, Maker Media Inc
- P5js.org
- Rune Madsen: "Programming Design Systems" på <https://programmingdesignsystems.com/>
- Gerstner, Karl (2007), Designing Programmes, Lars Müller Publishers
- Armstrong, Helen (ed.) (2016), Digital Design Theory, Princeton Architectural Press

**Literature** (available online):

- Processing.org
- LinkedIn Learning
- Daniel Shiffman: "Coding Train" på <https://www.youtube.com/user/shiffman>

**Tools:**

Processing and P5.js.

Adobe Illustrator and Photoshop. Pen and paper.

15.11.2023

Side 2 / 3

**Preconditions for the exam:**

Meeting the exam prerequisites is a requirement for the student to participate in the course exam. Examination prerequisites may include attendance, participation, group work, assignments, presentations, etc. Failure to meet an examination prerequisite will result in the student failing an examination attempt.

**Mandatory attendance:**

Attendance is mandatory for the course. The learning system itslearning indicates the learning and teaching activities for which physical attendance is mandatory (MP).

**Compulsory participation:**

Participation is compulsory in group work and feedback.

**Remedial options:**

In case of legal absence, remediation applies.

Substitute assignments: absences from teaching and learning activities may be replaced by one or more assignments if the teacher deems it possible. If the student's absence from teaching and learning activities is deemed excessive in relation to the content and learning objectives of the course, the course must be rescheduled.

**Preconditions for the exam:**

All scheduled lessons must have been attended. Assignments, group work, and assignment reviews must have been participated. All set assignments must be punctually handed in and approved.

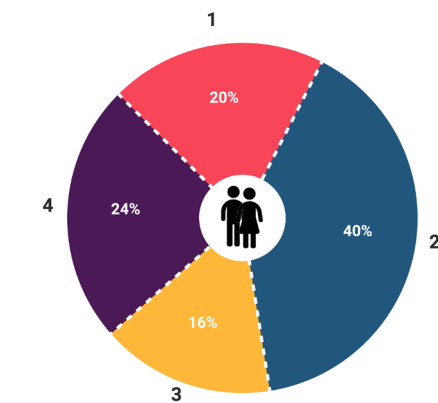
## Examination:

An overall assessment on the 7-point scale with internal examiner. Examination is individual or in groups of max. 2 students. 15 minutes oral examination; voting included (+ 5 minutes for 2-person group examination). Examination format: The course ends with a creative solution in which the student documents his/her competences to independently analyze, assess, document, and solve design and coding problems. Students are assessed individually. The assessment reflects an overall evaluation of the creative solution.

## Study Activity Model:

The Study Activity Model

**Creative Code**  
5 ECTS points  
3 weeks



DMJX

### Category 1

The lecturer has primary responsibility for the study activities, and the students have co-responsibility through their preparation and participation. Participation by students and one or more lecturers.

Lectures, live coding, demonstrations and presentations.

### Category 2

The lecturer has primary responsibility for defining the learning activities, and the students have primary responsibility for taking an active part in the planned study activities. Participation by students only.

Assignments and tutorials.

### Category 3

Students have primary responsibility for the study activities, and the lecturer has co-responsibility for ensuring appropriate settings for the activities. Participation by students only.

Reading and research.

### Category 4

Students have primary responsibility for the learning activities, and the lecturer has co-responsibility for ensuring appropriate settings for the activities. Participation by students and one or more lecturers.

Individual supervision.

15.11.2023

Side 3 / 3

Godkendt/NN - 2023