Danish School of Media and Journalism
Visual Communication – Coded Design
Course description
Spring semester 2025
Experience Design
4. semester

Number of ECTS Credits: 30 ECTS

Aims:
The student will gain knowledge, skills, and practical insight into developing engaging experiences based on a specific problem statement and grounded in their own research. The course draws on knowledge of programming, storytelling, visualization, and game mechanics to develop communication products that involve users on selected platforms.

Pedagogical and didactic approaches:
The learning activities in this course are based on the core principles of Reflexive Practice-Based Learning (RPL; see the study regulations). The course will consist of a blend of lectures and self-study. There will be exercises and assignments to be completed both individually and in groups. The student will learn to connect practical actions with theoretical reflection, while integrating relevant theory and knowledge specific to the study program. The aim is to enable students to justify and qualify their actions and choices.

Working methods:
Graphic design, game design theory, logic, human-computer interaction, visual communication theory, idea generation technique, programming, software- and hardware prototyping, wireframing, user interface design, oral argumentation, presentation technique.

Learning outcomes:
The students will obtain the following during the course:

Knowledge and understanding:

- Practical knowledge and understanding of the theory and practice related to designing digital experiences
- Practical knowledge and understanding of the theories and practices involved in designing digitally driven physical and spatial experiences
- Practical knowledge and understanding of the theory and practice related to designing game concepts and prototypes
- Practical expertise in software and hardware for creating functional, audience-driven interactive experiences
- Critical assessment of data sources and research material for use in production

Skills:
- Prototype physical, spatial, and interactive experiences informed by insights from research on a given topic
- Utilize sensors and electronics as core components of a communication product

- Create game concepts and prototypes based on a defined communication problem and gathered research

Competences:
- Integrate insights from research with knowledge in visual communication to develop concepts based on fictional as well as real life cases
- Integrate research insights with knowledge of visual communication and electronics prototyping to develop concepts based on a defined brief
- Work alone and in teams on key elements in larger communication products

Literature (to be purchased before the course begins):
- None

Literature (hand out):
– Hunicke, R., LeBlanc, M., Zubek, R. (2004) "MDA: A Formal Approach to Game Design and Game Research"
– Szerovay, K. (2019) "Gamification – part 1,2,3" from UX knowledgebase Sketch (https://uxknowledgebase.com/gamification-part-1-73a7c7afd4d1)

Compendium with extracts from relevant theory and methodology, including:
- Wille, G., Wille, J. I., & Andreasen, S. J. (2023). *Håndbog i universskabelse*. Samfundslitteratur.
- Nakamura, J., & Csikszentmihalyi, M. (2002). *The concept of flow*. Handbook of positive psychology, 89-105.
- Interaction Design Foundation. (n.d.). *The Interaction Design Foundation*. https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed
- Jordan, P.W. (1999). *Pleasure with products: Human factors for body, mind and soul.*
- Kaivo, M., Cuartielles, D., & Spikol, D. (2024). *Designing activities and tools to support university students' creative and collaborative exploration of physical computing*. Proceedings of the International Conference on Networked Learning , 12, 55–64.
- Benyon, D. (2014) *Spaces of interaction, places for experience.* Synthesis Lectures on Human-Centered Information, 7, 1–129.
- Jetter, H.-C., Geyer, F., Schwarz, T. and Reiterer, H. (2012) Blended interaction: toward a framework for the design of interactive spaces. In AVI 2012: International Working Conference on Advanced Visual Interfaces
- Banzi, M., & Shiloh, M. (2014). *Getting started with Arduino* (3rd ed.). Maker Media, Inc.
- Platt, C. (2021). Make: Electronics: Learning by discovery (3rd ed.). Maker Media, Inc.
- Monk, S. (2013). *Hacking electronics: Learning electronics with Arduino and Raspberry Pi*. McGraw-Hill Education.
- Roberts, D. (2010). *Making things move DIY mechanisms for inventors, hobbyists, and artists*. McGraw-Hill Education.
- O'Sullivan, D., & Igoe, T. (2004). *Physical computing: Sensing and controlling the physical world with computers*. Course Technology Press.

Literature (available online):
- Unity Learn. (n.d.). *Unity Learn.* https://learn.unity.com/
- Udemy. (n.d.). Arduino *Step by Step Getting Serious.* Retrieved from https://www.udemy.com/course/arduino-sbs-getting-serious/learn/lecture/8026362
- Arduino. (n.d.). *Arduino project hub.* Retrieved from https://create.arduino.cc/projec-thub
- Adafruit. (n.d.). *Adafruit learning system.* Retrieved from https://learn.adafruit.com/
- SparkFun. (n.d.). *SparkFun tutorials.* Retrieved from https://learn.sparkfun.com/
- Relevant courses and videos from LinkedIn Learning and YouTube

Exam prerequisites

Fulfillment of exam prerequisites is a requirement for the student to be able to participate in the course exam. Exam prerequisites may include compulsory attendance, compulsory participation, group work, assignments, presentations, presentations, etc. Failure to fulfill exam prerequisites means that the student has lost an exam attempt.

Mandatory attendance

Physical attendance at school is compulsory on all school days. If, in exceptional cases, there is no physical attendance obligation for teaching or learning activities, this is indicated with an "FF" (voluntary attendance) in the itslearning system.

Compulsory participation

Participation in group work and supervision is compulsory.

Remedial options: In case of legal absence, remediation applies.

Substitute assignments: Absence from teaching and learning activities can be replaced with 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 course content and learning objectives, the course must be repeated.

Examination: Assessed using the 7-point grading scale and external grading.
Examination form: The course concludes with a creative solution and a report in which the student documents his or her competencies to independently analyze, assess, document, and solve communication problems. 30-minute oral exam, grading included (+10 minutes for 2-person group exams).
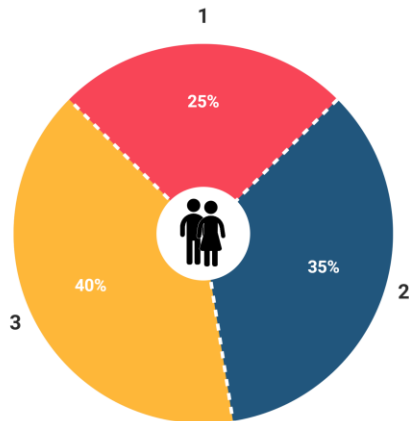
Students are assessed individually. The assessment reflects an overall evaluation of the creative solution, the academic argumentation, and the oral presentation.

Study Activity Model:

The Study Activity Model

Applied Interactive Design
25 ECTS points

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.

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.

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.

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.

Godkendt DTM, 17.01.2025

Danmarks Medie- og Journalisthøjskole