AALBORG UNIVERSITY

Course Module Description

General course information
Title: Design Experiments
Type: Course module
Language of instruction: English
Location of the lecture: Campus Copenhagen

ECTS points: 5 ECTS

Period: 1 September 2022 — 31 January 2023

Placement
3rd semester, M.Sc. in Lighting Design

Course coordinator
Ellen Kathrine Hansen (coordinator), Lisbeth Nykjær and Christine Pedersen (secretary)

Academic content and relationships to other modules/semesters
Since we have experienced a need for theory and scientific methods on how to validate and communicate qualitative parameters in lighting design, we have developed a possibility to choose to focus on The Design Experiment as a methodology. It is possible to choose an individual focus area, maybe in relation to a specific topic that will be explored in the project of LiD9 and/or the Master Theses.
This course will develop the ability to collect and develop knowledge in a specific chosen focus area that relates to lighting design and to structure an academic process through the methodology of the Lighting Design Experiment. This will include investigation of a specific area using mixed methods and synthesizing it with lighting design in an explorative study combining the profession of lighting design with scientific methodologies and processes within design research.

The formal study plan description of the module can be found here:

https://moduler.aau.dk/course/2022-2023/MSNLIDM3202?lang=da-DK

The studies will be supported by selected literature and lecture on how design research, explorative studies, and the design experiment can be implemented in a creative and scientific design process. This will be followed up by supervision on how students individually can integrate knowledge and methodologies in praxis on the Lighting Design Experiment and how the findings from the experiment might be integrated in semester project/theses.

The course will consist of internal lectures and literature providing examples of how to apply a research and an analytical perspective in lighting design and research in general through the experiment.

The course will thus provide the student with analytical and methodological tools to be applied in the research study of the LID9 report and for the master thesis in the following semester.

Objectives and learning goals
The learning objective is to understand how to synthesise scientific knowledge in a specific area with lighting design to create synergy and new innovative solutions.

Extent and expected work load
By signing up for the course “focus area” the student must hand in a short scientific paper, app. 6 pages, which might refer to the theoretical chapter of the LID9 internship report, semester project or a pre-analysis for the theses. The student is expected to spend 8 days on lecture, literature, collecting knowledge, designing an experiment and running the experiment, and 5 days writing the paper.

Pre-requisites for participation
See the module description (find the link above) for any further detail on pre-requisites.

Examination
Modality and duration: Individual oral exam based on submitted mini project.
Assessment: Pass/Not Passed

Pre-approved aids: Mini project report
Prerequisites for participation: Timely hand-in of project documentation.
Further detail on the exam: The examination will be based on the mini-project
Information concerning the mini-project: The mini project is a short scientific paper, app. 6 pages, which can refer to the students theoretical chapter of a semester project or a pre-analysis for the theses of the student. The paper should be written individual, and the topic is chosen by the student. The paper must demonstrate the ability to structure and synthesise scientific knowledge in a specific area with lighting design and ability to elaborate on how knowledge and design can create synergy and new innovative solutions.