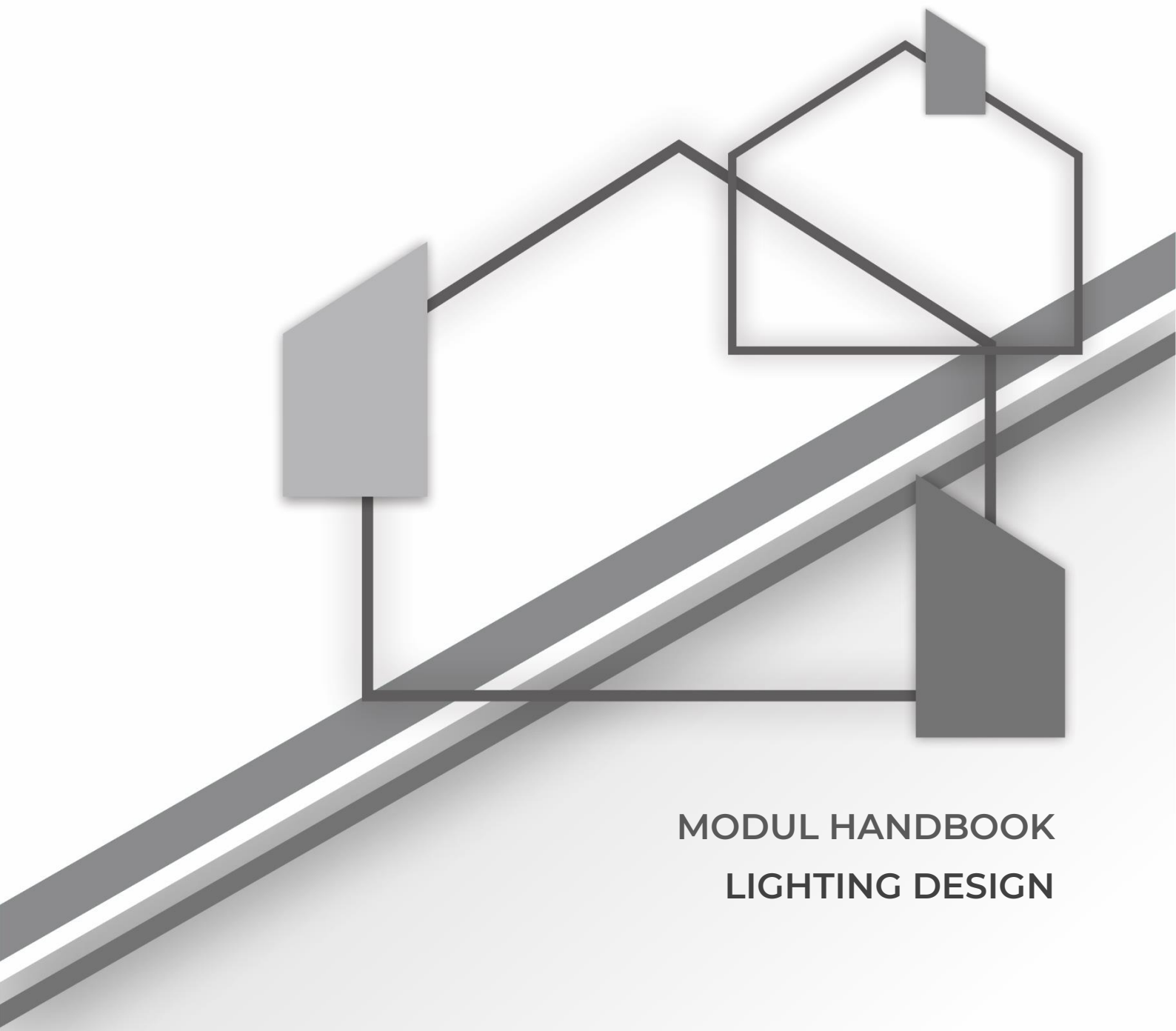
# MODUL HANDBOOK
# LIGHTING DESIGN

Bachelor Degree Program
Department of Interior Design
Faculty of Creative Design and Digital Business

**Institut Teknologi Sepuluh Nopember**



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Description of Course Unit

| | |
|---|---|
| Course unit title | Lighting Design |
| Course unit code | DI184628 |
| Type of course unit (compulsory, optional) | compulsory |
| Level of course unit (according to EQF: first cycle Bachelor, second cycle Master) | first cycle Bachelor |
| Year of study when the course unit is delivered (if applicable) | 3rd year |
| Semester/trimester when the course unit is delivered | 6th semester |
| Number of ECTS credits allocated | 3.2 credits |
| Name of lecturer(s) | Thomas Ari Kristianto, S.Sn., M.T. |
| Learning outcomes of the course unit | 1. Students are able to work together in finding the problems and solving the problem of design concepts in the context of lighting design<br>2. Students are able to make lighting design analysis in interior<br>3. Students are able to master lighting design |
| Mode of delivery (face-to-face, distance learning) | face-to-face |
| Prerequisites and co-requisites (if applicable) | - |
| Course content | 1. Basic Artistic System: lighting and stage system<br>2. The Basics of Lighting design<br>3. Lighting Equipment |
| Recommended or required reading and other learning resources/tools | 1. Cross, Nigel (2001), Engineering Design Methods, Singapore, John Wiley & Sons.<br>2. Panero, Julius dan Zelnik, martin (1979), 'Dimensi Manusia dan Ruang Interior', Erlangga, Jakarta.<br>3. Mahardini (2010), Desain Rumah Buku, Tugas Akhir ITS.<br>4. Maulana, Dihlis (2010), Tugas Desain Interior 2, ITS, Surabaya.<br>5. R Bean. 2014. Lighting: interior and exterior<br>6. Odabaşioğlu, S. and Olguntürk, N., 2015. Effects of coloured lighting on the perception of interior spaces. Perceptual and motor skills, 120(1), pp.183-201.<br>7. Poldma, T., 2009. Learning the dynamic processes of color and light in interior design. Journal of Interior Design, 34(2), pp.19-33.<br>8. Park, N.K. and Farr, C.A., 2007. The effects of lighting on consumers' emotions and behavioral intentions in a retail environment: A cross–cultural comparison. Journal of Interior Design, 33(1), pp.17-32.<br>9. Winchip, S., 2022. Fundamentals of Lighting:-with STUDIO. Bloomsbury Publishing USA.<br>10. Kristian, M.S. and HALIM, E.A., 2018. Pengaruh Cara Distribusi Pencahayaan Buatan Pada Kenyamanan Bercengkerama Pengunjung Kafe. Serat Rupa Journal of |

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|---|---|
| | Design, 2(2), pp.148-162. |
| Planned learning activities and teaching methods | Problem-Based Learning, Project-Based Learning, and Blended Learning |
| Language of instruction | Indonesia and English |
| Assessment methods and criteria | Assignment, Project, Lab Practices, Quizzes, Midterm Exam and Final Exam |

## Learning Outcome (LO)

| LO | Description |
|---|---|
| LO1 | Able to think critically in conducting interior design research |
| LO2 | Able to think critically and creatively in preparing interior design ideas/ concepts |
| LO3 | Able to make alternatives, development, and interior design details (implementation of concepts) |
| LO8 | Mastering practical design knowledge about Geometry, building, communication (drawing), methodologies and consequences in the field of interior design |

## Course Learning Outcome (CLO)

| CLO | Description | Mapping of CLO to LO | | | | Weight of CLO (%) |
|---|---|---|---|---|---|---|
| | | LO 1 | LO 2 | LO3 | LO8 | |
| CLO1 | Students are able to understand the basic principles of natural lighting and its application in interior spaces | x | | | x | 25 |
| CLO2 | Students are able to take measurements, analyze natural lighting and present solutions to achieve comfort in interior spaces | | x | x | x | 25 |
| CLO3 | Students are able to understand the principles and standards of artificial lighting and its application to interior spaces | x | | | x | 25 |
| CLO4 | Students are able to carry out needs assessments and present artificial lighting solutions in interior spaces according to the function of the room | | x | x | x | 25 |

## Asessment Plan

| No. | Course Learning Outcomes* | Asessment Technique | Asessment Weight (%) |
|---|---|---|---|
| 1 | **CLO1**<br>Students are able to understand the basic principles of natural lighting and its application in interior spaces | Natural Lighting Metering Task Series (Case Method) | 10 |
| 2 | **CLO1**<br>Students are able to understand the basic principles of natural lighting and its application in interior spaces<br>**CLO2**<br>Students are able to take measurements, analyze natural lighting and present solutions to achieve comfort in interior spaces | Natural Lighting Solutions Task Series (Case Method) | 22,5 |
| 3 | **CLO3**<br>Students are able to understand the principles and standards of artificial lighting and its application to interior spaces | Artificial Lighting Study Task Series (Case Method) | 10 |
| 4 | **CLO3** | Artificial Lighting Solutions Task | 22,5 |

| No. | Course Learning Outcomes* | Asessment Technique | Asessment Weight (%) |
|---|---|---|---|
| | Students are able to understand the principles and standards of artificial lighting and its application to interior spaces<br>**CLO4**<br>Students are able to carry out needs assessments and present artificial lighting solutions in interior spaces according to the function of the room | Series (Case Method) | |
| 5 | **CLO1**<br>Students are able to understand the basic principles of natural lighting and its application in interior spaces<br>**CLO3**<br>Students are able to understand the principles and standards of artificial lighting and its application to interior spaces | Mid Semester Evaluation (Cognitive - Midterm Exam) | 15 |
| 6 | **CLO2**<br>Students are able to take measurements, analyze natural lighting and present solutions to achieve comfort in interior spaces<br>**CLO4**<br>Students are able to carry out needs assessments and present artificial lighting solutions in interior spaces according to the function of the room | Final Evaluation (Cognitive - Final Exam) | 20 |
| Total Assessment Weight | | | 100 |

# Learning Outcome Plan

| Week | Sub Achievement-Subject Final Ability | Breadth (Learning Material) | Learning Method | Estimated Time | Students Learning Experience | Assessment Criteria and Indicator |
|---|---|---|---|---|---|---|
| 1 – 2 | Students are able to explain the position and relationship of Lighting Design course subject to other subjects | Introduction of Lighting Design subject and the relationship with other subjects | Interactive lecture and discussion | 2 lectures / meetings @ 120 minutes | Discussion | Attendance and be active during lectures |
| 3 – 5 | Students are able to analyze lighting design needs for a stage | Lighting design and stage | Interactive lecture and discussion | 3 lectures / meetings @ 120 minutes | Discussion | Be active |
| 6 – 7 | Students are able to work together in planning lighting design for a stage | Midterm examination and assignment 1 | Discussion and presentation | 2 lectures / meetings @ 120 minutes | Discussion and presentation | Assignment quality |
| 8 – 9 | Students are able to master the basics of lighting design | Basics of lighting design | Interactive lecture and discussion | 2 lectures / meetings @ 120 minutes | Discussion | Be active |
| 10 | Students are able to work together in planning lighting design using basics of lighting design | Assignment 2 | Interactive lecture and discussion | 1 lecture / meeting @ 120 minutes | Discussion and presentation | Assignment quality |
| 11 – 13 | Students are able to create a lighting design concept | Lighting design tools | Interactive lecture and discussion | 3 lectures / meetings @ 120 minutes | Discussion | Be active |
| 14 - 16 | Students are able to work together in planning lighting design for their own interior design project | Final examination | Discussion and presentation | 1 lecture / meeting @ 120 minutes | Discussion | Assignment quality |

REFERENCES (max 5)


1. Cross, Nigel (2001), Engineering Design Methods, Singapore, John Wiley & Sons.
2. Panero, Julius dan Zelnik, martin (1979), ‘Dimensi Manusia dan Ruang Interior’, Erlangga, Jakarta.
3. Mahardini (2010), Desain Rumah Buku, Tugas Akhir ITS.
4. Maulana, Dihlis (2010), Tugas Desain Interior 2, ITS, Surabaya.
5.


Note:

* Presentations, assignments, discussions, quizzes, lab practices