DEPARTMENT OF INTERIOR ARCHITECTURE AND ENVIRONMENTAL DESIGN

Course Code	Course Name	Year/Semester	Theory	Practice	Credits	ECTS
IAED 2106	LIGHTING DESIGN	2025-2026 / Spring	2	2	3	4

Level of Course: Undergraduate

Course Type: Core Course

Language of Instruction: English

Course time: Friday (Sec1: 09:00-13:00, Sec2: 13.30-17.30)

Course classroom: -

Mode of Delivery: Class Teaching, Presentation, Assignments, Project Development

Prerequisites and Co-requisites: N/A

Course Coordinator: Asst. Prof. Dr. Buket ŞENOĞLU
Lec. Parla ÖZKUL

Course Teaching Assistant: -

Course Objectives: The course builds upon the basic knowledge related to the theoretical and application aspects of lighting design. Course main aim is to improve students' knowledge about psychological and physiological effects of light on user.
Students will have an opportunity to explore the process of lighting design and how it affects the perception of space with color, texture and materials. Moreover, visual comforts and visual concepts for various functions will be covered.

Course Description: This course introduces the basic concepts and terminology of lighting. Within this content, the relationship between lighting and space will be taught by focusing on visual comfort, lighting control and level of the lighting. In addition, reflection and transmission of light, artificial light, light sources, calculation of average lighting for a quality environment will be examined. Students will be able to apply their knowledge to their design projects by using non-commercial lighting software.

Learning Outcomes: Upon successful completion of the course, students will be able to:

1. To gain the ability to conduct lighting designs for certain types of buildings and interiors by using the acquired basic knowledge on lighting.

2. To understand the differences between different light sources, characteristics and field of their usage and function.

3. To gain the ability to conduct lighting designs for certain types of buildings by using the acquired basic knowledge on lighting.

4. To understand the basic principles and accurate application methods of the building materials and building system designs.

Language:

5. Lectures presentation will be in English. Assignments and class practical exercises also will discuss in English. Students will be aware of the terminology of lighting design as well as their daily skills.

Recommended Textbooks:	1. Karleen M. and Benya J. M., (2012), "Lighting Design Basics", Wiley Press 2. Human Factors in Lighting, Peter Boyce 3. Cuttle C., (2008), "Lighting by Design", Routledge Press Publishing. (2009), "Light+Design A Guide to 4. Designing Quality Lighting for People and Buildings, Illuminating Engineers Society",Illuminating Engineering Society.
For the terminology:	IESNA Lighting Handbook, Illuminating Engineering Society of North America
Reading Textbooks:	1. Architectural Lighting, Egan, M.D. and Olgyay, V., 2002/2, McGraw-Hill 2. The Design of Lighting, Peter Tregenza & David Loe 3. Ganslandt, R. and Hofman H., (1992), "Handbook of Lighting Design", Erco Edition, Germany. 4. Cuttle C., (2008), "Lighting by Design", Routledge Press Publishing. (2009), "Light+Design A Guide to Designing Quality Lighting for People and Buildings, Illuminating Engineers Society", Illuminating Engineering Society.

Planned Learning Activities and Teaching Method:

Learning/Teaching Method: *This is both theoretical and practical course and students learn about lighting design principles, and they will create their own lighting design concept. The course is supported by lectures and verbal-visual presentations and individual desk critiques about their lighting design project.*

Assignments: *Exams, assignments, and term project are individual (except for the announced teamwork). Midterm exam responses will be evaluated for accuracy, thoughtfulness, and clarity. Assignments will be evaluated for content, quality of ideas, in terms of lighting design principles.*
There will be 3 assignments and also there will be a term project of lighting, which will be made in various steps. The student must complete the assignment and upload it to web site at the designated time, with name, last name, and ID number (late submissions will be evaluated %20 less).

Class Participation: *Regular attendance of all enrolled classes is expected. Do not be late for the class. Attendance will be taken through your signature within the first quarter of the class; if you come later, you will be considered half-attended. At the end of the Semester, your attendance will be reported on the UBS. Attendance is compulsory and in case of absenteeism of more than 20% for the practice and %30 for the theory, the system will automatically grade you "FX". If you miss a class, it is your responsibility to 'make up' all work, including items discussed in class. The class contribution will be measured in terms of quality, not quantity. If you need to leave early, you should notify your instructor at the commencement of the session.*

Academic integrity & plagiarism: *Academic integrity is the pursuit of scholarly activity based on the values of honesty, trust, fairness, respect, and responsibility. Practicing academic integrity means never plagiarizing or cheating, never misrepresenting yourself, never falsifying information, never deceiving or compromising the work of others. Basically, this means, either intentionally or unintentionally, using the words or ideas of someone else without giving credit, it's strictly forbidden.*

Use of Artificial Intelligence (AI):
Students are permitted to use artificial intelligence (AI) tools (such as ChatGPT, Grammarly, etc.) for grammar correction and academic writing improvement throughout their work. However, AI-generated original content (e.g., analysis, paragraph writing, conceptual description, etc.) must not exceed 20% of the submitted material.

In any case where AI tools are used, students are required to include a clear declaration within the

assignment/report/submission. This declaration must include the name of the AI tool/model used, the specific purpose, and a brief explanation of how it contributed to the work.

Example declaration:
"I used ChatGPT-4 for proofreading and restructuring the introductory paragraph." Failure to declare the use of AI tools when applied will be treated as a violation of academic integrity and plagiarism policies and may result in disciplinary action.

Course Textbooks: *There is no specific textbook for this course. Students are required to actively participate in the lectures and study the recommended reading textbooks and also do researches on the variety of architectural presentation techniques.*

Key Works: *In this course lectures and assignments mainly focuses on User Requirements, critical thinking, elements of design and the awareness of functions, and materials relation with lighting design.*

Specific Rules:

1. *Be punctual. Punctuality is a sign of respect toward yourself and the others.*
2. *Show respect for all the people and property around you.*
3. *Be responsible for your actions and meet all expectations.*
4. *Follow directions the first time they are given.*
5. *Students should raise their hand to signal a question or to answer a question.*
6. *Students should use the Internet at school for academic purposes only.*
7. *It is forbidden to record classes with any type of device.*

Communication: *If you have any question about the syllabus, your responsibilities in the course and assessment procedures please ask your instructor without any delay. Students are encouraged to visit the professor during their Office Hours. If you cannot make it to announced office hours, please make individual arrangements via e-mail. However, do not expect the professor to respond at length via e-mail to questions of content, definition of terms, grading questions etc. If you have a question that requires a substantive response, please set up an appointment to speak with your instructor.*

Course Contents*: (Weekly Lecture Plan)	Date	Week	Chapter Topic	Take-home exercise
	13.02.26	**1**	*Introduction to the Course* *Physics of Light (wavelength, color spectrum) and definitions* *Vision and Perception* *Sources of Light and Characteristics, Modes Interfaces*	*N/A*
	20.02.26	**2**	*Overview sources of light and Characteristics, Modes Interfaces* *In class studio work*	*N/A*

27.02.26	3	Eyes and Vision Lighting Terms, Objectives and Parameters	Assignment 1
06.03.26	4	Lighting Design (Function, dimensions, layout, style, ambience…) Applications Lighting Systems (Primary, Secondary) Illumination Level Calculation	Assignment 2 (Presentation preparation)
13.03.26	5	Presentations Artifical Light Sources Lighting Design Drawing Principles Midterm Project Description	General overview on topics covered Midterm preparation
20.03.26	6	NATIONAL HOLIDAY	Midterm preparation
27.03.26	7	Midterm Project Critiques	Midterm preparation
	8	MIDTERM	N/A
10.04.26	9	Natural Light	N/A
17.04.26	10	Quiz Final Project Description	Final Project Development: Developing Concept, Scenario
24.04.26	11	Critiques on Lighting Design, Concept, Scenario	Lighting Design Project Development: Plans, Mood board, Material Board
01.05.26	12	NATIONAL HOLIDAY	
08.05.26	13	Critiques on Plans, Sections, 3D, Model, Material Board and Mood Board	Finalizing the project
15.05.26	14	Critiques on Final Project	N/A
22.05.26	15	Critiques on Final Project	N/A
		FINAL EXAM	

PLEASE NOTE: Details of the syllabus and course schedule are subject to minor changes that will be announced in class.

Grading: *Midterm and final exam responses will be evaluated for accuracy, thoughtfulness and clarity. Assignments will be evaluated for content, quality of ideas and clarity of presentation (including both writing and graphics). Students' progress also will be evaluated throughout the semester based on their performance in critiques. If total assessment grade is lower than 50, student needs to repeat the course.*

Assessment Methods and

METHODS	EFFECTS ON GRADING

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Criteria :

Project development (Assignments/Presentation/Quiz)	30%
Midterm Submission	30%
Final Submission	40%

ECTS Workload Table :

ACTIVITIES	NUMBER	HOUR	WORKLOAD
Course Teaching Hours	13	2	26
Project development	8	4	24
Midterm	1	4	4
Practical Hours	13	2	26
Final Project Preparation	1	16	16
Final	1	4	4
Total Workload	**0**	**0**	**100**
Total workload/25			**100/25**
ECTS			**4**

GRADING AND EVALUATION

The students' progress will be evaluated throughout the semester.

Grade Scale:

GRADE	MARKS	VALUE
A+	-	
A	95-100	4.00
A-	85-94	3.70
B+	80-84	3.30
B	75-79	3.00
B-	65-74	2.70

GRADE	MARKS	VALUE
C+	60-64	2.40
C	55-59	2.20
C-	50-54	1.70
D+	45-49	1.30
D	40-44	1.00
F	0-39	0.00