



University/Academy: Arab Academy for Science, Technology & Maritime Transport
Faculty/Institute: College of Engineering & Technology
Program: B.Sc. Architectural Engineering and Environmental Design

Form no. (12): Course Specification

1- Course Data

Course Code: AR 522	Course Title: Colors & Light in Internal Spaces	Academic Year/Level: 5th year / 9th semester
Specialization: Architecture	No. of Instructional Units Credit 2 Lecture 1 Tutorial 3	Prerequisite AR114

2- Course Aim

<p>Color is an inherent visual property of all form. The colors we attribute to objects find their source in the light that illumines and reveals form & space. Without light, color does not exist. This course emphasis the study of color as a property of light. Study of color, hue, value & intensity. Altering colors with pigments or with light, the effects of adjacent colors, color schemes, tonal & chromatic distribution, texture & light, general lighting task lighting & accent lighting, brightness, contrast, glare, diffusion ...etc. The course explores the use of light as a design element in interior spaces with an overview of the basics of electricity and electrical distribution systems.</p> <p>The course aims to:</p> <ul style="list-style-type: none">• Provide basic knowledge of colors and light in interior spaces.• Illustrate uses of light as a design element in interior spaces.
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3- Intended Learning Outcomes

a- Knowledge and Understanding	Through knowledge and understanding, students will be able to: <ul style="list-style-type: none">• Demonstrate understanding of colors and light in interior spaces.• Understand the relationship of light and color, and effects of light on color and space.• Demonstrate understanding of new lighting technologies.
b- Intellectual Skills	Through intellectual skills, students will be able to: <ul style="list-style-type: none">• Make both color and light decisions.• Apply light as a design element in interior spaces.
c- Professional Skills	Through professional and practical skills, students will be able to: <ul style="list-style-type: none">• Apply color and lighting principles, and concepts in interior design applications.• Conduct comprehensive research using appropriate methods.
d- General Skills	Through general and transferable skills, students will be able to: <ul style="list-style-type: none">• Apply research work in an interdisciplinary environment and elaborate with others.• Express personal opinion and present it correctly in oral, reading and written form.• Present different subjects scientifically, logically and professionally.

4- Course Content

Week No.1	Introduction
Week No.2	Properties of colors.
Week No.3	Basic theories and principles of colors 1
Week No.4	Basic theories and principles of colors 2
Week No.5	Effects of color on human physiology as well as the therapeutic use of color for the psychological well-being of humans.
Week No.6	International example
Week No.7	Continuation of the previous lecture and evaluation.
Week No.8	Introduction to lighting in interiors
Week No.9	Basic theories and principles of natural lighting
Week No.10	Basic theories and principles of artificial lighting
Week No.11	New lighting technologies and International example
Week No.12	Continuation of the previous lecture and evaluation.
Week No.13	Research presentation
Week No.14	Research presentation
Week No.15	Revision.

5- Teaching and Learning Methods

The course comprises a combination of:
Lectures, discussion sessions, and research assignment

6-Teaching and Learning Methods for Students with Special Needs

- Consulting with lecturer during office hours.
- Consulting with teaching assistant during office hours.
- Private sessions for redelivering the lecture contents.
- For handicapped accessibility, please refer to program specification.

7- Student Assessment

Asses No.	Procedures used		Start Week No.	Subm. Week No.	Weighting of Asses.
	Type	To assess			
1	Written Exam	Knowledge and understanding.		7	30%
2	Written Exam	Knowledge and understanding.		12	20%
3	Research	All skills	7	13	10%
4	Written Exam	Knowledge and understanding.		15	40%
Total					100%

8- List of References:

a- Course Notes	Notes are handed out on a weekly basis.
b- Required Books (Textbooks)	N/A
c- Recommended Books	<ul style="list-style-type: none"> • Faber Birren, <i>Light, Color, and Environment</i>, Schiffer Publishing, 1988. • John Pile, <i>Color in Interior Design</i>, McGraw-Hill Professional, 1997. • Jonathan Poore, <i>Interior Color by Design</i>, Rock Falls Inc., 1994
d- Periodicals, Web Sites, etc.	Tiiu Poldma, <i>Learning the Dynamic Processes of Color and Light in Interior Design</i> Journal of Interior Design, Volume 34, Issue 2, pages 19–33, January 2009