Evaluation of The Use of Color and Identity Formation in Educational Spaces: The Case of the Eastern Mediterranean University Campus-North Cyprus

Amirhossein Azizi

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Approval of the Institute of Graduate Studies and Research

Prof. Dr. Ali Hakan Ulusoy
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science in Interior Architecture.

Assoc. Prof. Dr. Afet Coşkun
Chair, Department of Interior Architecture

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Science in Interior Architecture.

Asst. Prof. Dr. Kamil Güley
Supervisor

Examining Committee

1. Assoc. Prof. Dr. Zehra Öngul

2. Asst. Prof. Dr. M.Selen Abbasoğlu Ermiyagil

3. Asst. Prof. Dr. Kamil Güley

ABSTRACT

A basic component of architectural and interior architecture, color shapes spatial perception, cognitive ability, and emotional reactions. Though important, its use in learning environments is still mostly arbitrary and usually devoid of a method grounded on empirical data. With an especially eye on its effects on spatial identity, navigation, and user experience, this study looks at how color shapes educational environments.

The primary research question is: Can a methodical approach to employing color improve the quality of spaces in various educational environments? The study seeks to close the gap between color theory and its pragmatic implementation in educational institutions. To investigate this, the study looks at the relationship between color and spatial identity and investigates whether the properties of color could help shape a methodical approach to the design of learning environments.

Using a mixed-method approach—that which combines qualitative and quantitative techniques—this study uses While field observations, organized inventory tables, and graphic documentation add empirical evidence, a thorough literature review creates a theoretical basis. The distribution and impact of color in educational settings are evaluated using quantitative studies. The case study is on Eastern Mediterranean University (EMU), where particular instructional environments are examined to assess present color schemes and suggest changes.

The study admits certain limits that greatly affect color visibility: cultural differences in color perception and the absence of lighting influences. Moreover, the study is limited to faculty buildings on the university campus, therefore eliminating auxiliary areas including sports facilities and student service centers.

The results show that a well-organized technique for color application in educational environments improves spatial awareness, cognitive function, and emotional well-being. Based on the purpose of each place, the study advises different colors should be used strategically: cool tones like blue and green in schools to promote focus, warm hues in social areas to encourage engagement, and neutral colors in transitional zones to help orientation. The study concludes that adding an evidence-based color strategy will help to raise the general functionality and quality of learning surroundings.

This study offers a disciplined framework for the use of color, therefore supporting the larger debate on design in education. It provides insightful analysis for builders, teachers, and legislators trying to maximize learning settings with well-chosen colors. Future studies should take lighting and color interaction into account to improve spatial cognition in learning environments even more.

Keywords: Color, Educational Spaces, Space Identity, Cognitive Effects of Color, Campus Design.

ÖZ

Mimari ve iç mimari temel bir bileşeni olan renk, mekânsal algıyı, bilişsel yetileri ve duygusal tepkileri şekillendirir. Ancak, öğrenme ortamlarında kullanımı hâlâ büyük ölçüde rastlantısaldır ve çoğunlukla ampirik verilere dayalı sistematik bir yöntemden yoksundur. Özellikle mekânsal kimlik, yönlendirme ve kullanıcı deneyimi üzerindeki etkilerine odaklanan bu çalışma, rengin eğitim ortamlarını nasıl biçimlendirdiğini araştırmaktadır.

Bu bağlamda, temel araştırma sorusu şudur: Renk kullanımına yönelik sistematik bir yaklaşım, farklı eğitim ortamlarındaki mekân kalitesini artırabilir mi? Çalışma, renk teorisi ile eğitim kurumlarındaki uygulamalı kullanımı arasındaki boşluğu kapatmayı amaçlamaktadır. Bu doğrultuda, renk ile mekânsal kimlik arasındaki ilişki incelenmekte ve rengin belirli niteliklerinin, öğrenme ortamlarının tasarımında sistematik bir yaklaşımı şekillendirmeye yardımcı olup olamayacağı araştırılmaktadır.

Nitel ve nicel yöntemleri bir araya getiren karma yöntem kullanılarak yürütülen bu çalışmada; saha gözlemleri, düzenlenmiş envanter tabloları ve grafik dokümantasyon gibi ampirik kanıtlar sunulurken, kapsamlı bir literatür taraması kuramsal bir temel oluşturmaktadır. Eğitim ortamlarında rengin dağılımı ve etkisi, nicel analizler ile değerlendirilmektedir. Doğu Akdeniz Üniversitesi (DAÜ) vaka çalışması olarak ele alınmış, belirli eğitim mekânları incelenerek mevcut renk şemaları değerlendirilmiş ve iyileştirme önerileri sunulmuştur.

Çalışma, renk algısında kültürel farklılıklar ve aydınlatma etkilerinin göz ardı edilmesi gibi renk görünürlüğünü önemli ölçüde etkileyen bazı sınırlılıkları kabul etmektedir. Ayrıca araştırma, üniversite kampüsündeki fakülte binalarıyla sınırlı tutulmuş olup spor tesisleri ve öğrenci hizmet merkezleri gibi yardımcı alanlar kapsam dışı bırakılmıştır.

Elde edilen bulgular, eğitim ortamlarında renk uygulamasına yönelik iyi organize edilmiş bir yöntemin mekânsal farkındalığı, bilişsel işlevleri ve duygusal iyi oluşu artırdığını göstermektedir. Çalışma, her mekânın işlevine bağlı olarak farklı renklerin stratejik olarak kullanılmasını önermektedir: Dikkati artırmak için okullarda mavi ve yeşil gibi soğuk tonlar, etkileşimi teşvik etmek için sosyal alanlarda sıcak renkler ve yön bulmayı kolaylaştırmak için geçiş bölgelerinde nötr renkler tercih edilmelidir. Sonuç olarak, ampirik verilere dayalı bir renk stratejisinin eğitim ortamlarının genel işlevselliğini ve kalitesini yükselteceği vurgulanmaktadır.

Bu çalışma, renk kullanımına yönelik disiplinli bir çerçeve sunarak eğitim tasarımı konusundaki daha geniş tartışmalara katkı sağlamaktadır. Mimarlar, eğitimciler ve politika yapıcılar için öğrenme ortamlarını en iyi şekilde düzenlemek adına değerli bir analiz sunmaktadır. Gelecek araştırmalar, mekânsal bilişi daha da geliştirmek için aydınlatma ile renk etkileşimini ele almalıdır.

Anahtar Kelimeler: Renk, Eğitim Mekânları, Mekânsal Kimlik, Rengin Bilişsel Etkileri, Kampüs Tasarımı.

DEDICATION

To My Family...

ACKNOWLEDGMENT

The period of my master's degree was one of the best times of my life. Throughout this journey, I faced both victories and challenges that taught me valuable life lessons. I developed a resilient mindset that allowed me to patiently tackle problems and experience profound personal growth through love—both intensely and gently. I am grateful to have had some truly wonderful people by my side during this journey.

I owe a great deal of gratitude to my supervisor, Assist. Prof. Dr. Kamil Güley, who consistently expected patience and a positive attitude from me while serving as an exceptional guide. He has provided support in various roles, acting as a professor, a friend, and even a brother at times. This thesis would not have been possible without your unwavering help, dear Kamil Güley. Your wise advice, insightful feedback, and generous suggestions have been invaluable, and I cannot thank you enough.

I would also like to express my heartfelt gratitude to my family. They have always believed in me and supported me throughout this journey. Without their encouragement, I would not have been able to complete a project that they were so proud of. Their unwavering support and faith in me helped boost my morale during challenging times. From the bottom of my heart, thank you.

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INTRODUCTION

1.1 Definition of the Problem

Color is a vital design aspect, shaping a space's atmosphere, functionality and overall impact. It's crucial in building and interior architecture because it can make people feel things, send messages, and make a space feel balanced or off-balance. Understanding how color works in design is important for making places that have meaning and resonance. Sadly, its full potential is often not used to its fullest.

Color is a regular part of people's lives. People deal with this issue regularly in their daily lives. They are introduced to color in a variety of places, like schools, workplaces and other public areas. Color is everywhere and has a lot of effects, so it's important to look into what part it could play in educational spaces.

The right use of color in these kinds of educational spaces can help separate and identify different parts of school grounds, encouraging better use of these areas and making them better overall. In academic places, the wrong use of color can make it harder to find your way around, which limits their best use and quality.

As Mahnke (1996) highlighted, the choice of color in schools directly correlates with its efficiency, quality and security. Choosing the color scheme in most cases is done by the administrators for teachers or even by architects on an extremely subjective

basis without considering any of the established scientific principles. They often don't consider the impact of color or the psychological effect of that.

It can be concluded that educational spaces are one of the most problematic areas when it comes to color. The current body of research on the topic of color in educational settings is narrow in scope, with the majority of studies concentrating on the impact of color on mood, color preferences or workplace efficiency. These studies shed light on color's larger effects but they don't provide any concrete recommendations on how to use color in the classroom. The lack of evidence-based solutions for the creation of spaces that enhance spatial cognition and user experiences is a significant barrier for educational institutions, architects and designers.

The lack of a systematic and methodical approach to the use of color in educational spaces is another thing that leads to design differences. It is common for decisions about which colors to use and how to use them to be based on personal preferences or subjective opinions instead of scientific study or design principles. Color may help with identifying and understanding learning spaces, however, there are no evidence-based recommendations to this claim.

Moreover, those educational surroundings would not be readily discernible about visual cues and color. Indeed, it might have been somewhat confusing for students, faculty and visitors in particular areas of educational spaces to work out the educational spaces only through a consistent and purposeful application of color. Thus confusion, the difficulties of easy access, inefficiency and the failure to submit to the learning environment that no student, faculty or visitor should expect in the educational spaces ensue.

Thus, developing a comprehensive and methodological approach to the use of color in educational spaces is crucial to optimizing spatial cognition and improving user experiences and the quality of space.

Also, the unique features and needs of educational spaces mean that specific studies and guidelines for using color are needed. Classrooms, labs, libraries and administrative offices are just a few of the places that make up educational settings. Each of these rooms is used for different things and needs a different amount of privacy, stimulation and attention. So, to have the best teaching spaces possible, one needs to know how to use color in different places so that it fits with their intended use.

The lack of a systematic and all-encompassing approach to employing color in unplanned educational spaces, particularly those with limited budgets for improving space quality, is the problem this study seeks to solve. Even while building, it's very uncommon for those who aren't experts in the field, such as interior architects or architects, to be tasked with choosing colors, even though they should know better. This problem leads to inconsistent design schemes, bad user experiences and not enough differentiation and identification of different learning settings. The study will help fill this knowledge gap by coming up with evidence-based suggestions and plans for making places better and improving spatial memory based on color.

1.2 Aims of The Thesis

This study has several aims, considering all the issues raised in this chapter's preceding portion. The first aim of this study is to emphasize the significance of color to other researchers, architects, academicians, educators, and everyone interested in

educational spaces. The significance of color cannot be undervalued or overlooked. Color is too important not to belong to a specific group and includes all the people such as painters, architects, etc.

The second aim of this study is to offer a helpful review of the existing theoretical data on color and educational spaces. It aims to incorporate the following topics within this theoretical framework: The fundamentals of color and the Psychological Effects of Colors on Humans also, how they relate to educational environments.

Following a thorough examination of the aforementioned theoretical factors, the main aim of this research is to enhance spatial identity through the strategic use of color in educational spaces to enhance the identification and understanding as well as increase the quality of different spaces. To establish a robust working framework, this study addresses several core research questions that underpin its foundation.

This study covers various fundamental research questions to develop a healthy working model that aims to achieve the study's aim, aligning to highlight color's importance in educational space.

The main research question is as follows:

- Could a methodological approach to using color to increase the quality of spaces be developed in different educational spaces? If Yes, How?

To address the main research question, the following sub-research questions will be explored:

- What is the relationship between color and different educational spaces?
- How does the relationship between color and spatial identity manifest in

educational environments?

- What characteristics of colors can create a methodological approach to using color in different educational spaces?
- What colors can be used in which different parts of educational environments?

To put it another way, this study intends to provide useful insights and suggestions for the use of color in educational environments by responding to the aforementioned primary and secondary research questions. Individuals working in or interested in the subject will profit from the results because they will contribute to the development of a comprehensive model that facilitates the use of color in educational settings and the comprehension of diverse learning spaces. demonstrating how color may be strategically employed to enhance educational spaces for both students and teachers is the overarching purpose of this study to increase the quality of space by formation of identity by color.

1.3 Research Methods of The Thesis

The role of color in educational settings will be looked at in depth through both qualitative and quantitative research methods in this study. Before starting with the qualitative methods, will do a thorough study of the existing literature to build a theoretical framework. This review will look at recent studies that look at the role of color in educational spaces. This study will do this by using scholarly articles, books and other related texts. Then, selected educational spaces will be observed to look at how complicated their structures and places are, especially when it comes to the use of color. The data from these observations will be put into structured inventory tables so that they can be evaluated in a more organized way. There will also be analytical evaluations of these places to see how well color affects how people think about space

and interact with it.

On the other hand, the quantitative approach will emphasize measurable analysis. It will include calculating and analyzing the color and identity of space concept distribution charts, which involve mapping the distribution and relationships between colors and the spatial identity of specific areas within educational environments. The resulting data will be visually represented through detailed graphical interpretations. These charts and graphs will provide a quantitative understanding of how color distribution aligns with functional and perceptual aspects of space. Furthermore, photographs of the environments will be captured to support both qualitative and quantitative analyses, offering visual evidence that complements the data-driven evaluations.

The results of these different methods will be put together to make guidelines that are based on evidence. These suggestions will be mostly about the best ways to use color to improve spatial awareness in educational settings. As a case study, the research will look at the Eastern Mediterranean University Campus. This will allow the proposed rules to be tested and used in educational spaces.

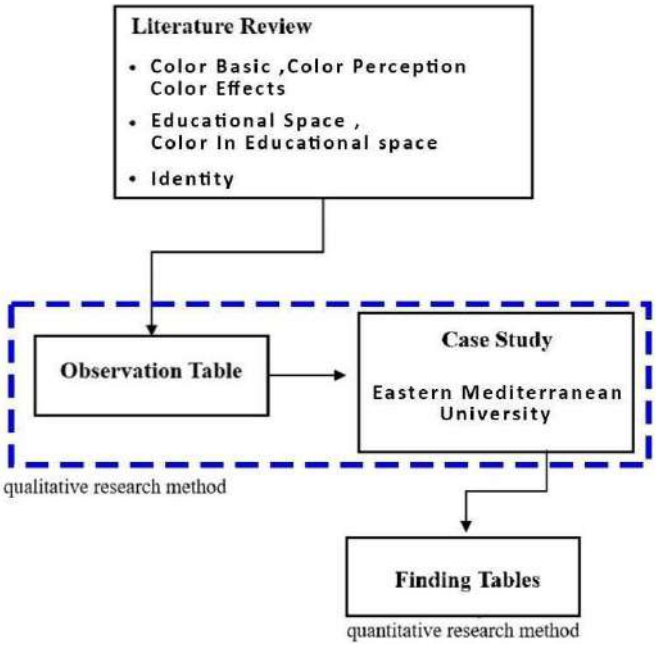


Figure 1: Research Method of the Thesis

1.4 Limitation of The Thesis

There are several restrictions on this research. It is important to recognize the limitations, as the aim of this study is to provide insight into the use of color in educational spaces. It is possible to correctly evaluate and extrapolate the results and conclusions by being aware of these limitations. The following limitations are anticipated in this study:

Diverse societies and cultures exhibit variations in the understanding of color concepts influenced by psychological and sociological factors. It is widely recognized that colors can carry symbolic, cultural or cosmetic values. However, it's important to note that the study omits exploring the culture-color relationship, excluding it from the model under examination.

The study primarily focuses on color, yet lighting conditions play a crucial role in the perception of color within educational spaces. Light is the most important component needed for color perception. Color cannot exist in the absence of light. Changes in natural and artificial lighting could affect the results of the study. A more in-depth look at how lighting changes could help us learn more about how people think about space. The thesis preparation procedure overlooks the influence of artificial lighting, concentrating exclusively on color perception in daylight. The study also fails to thoroughly examine the quality of light, including brightness and warmth, which can profoundly influence the ambiance of educational environments. Future studies may investigate the synergistic effects of color and light quality on spatial cognition.

Although these limitations are recognized, they should not diminish the relevance and importance of the study. By acknowledging these constraints and transparently discussing their potential effects. The results of this research can yield significant insights and establish a basis for subsequent inquiries into the topic.

Another key limitation of this study is its primary focus on educational spaces within a general framework. University campuses, as a limitation, encompass a wide range of spaces, including lecture halls, libraries, research laboratories, dormitories, recreational areas, administrative buildings and social hubs, each serving different functions and user groups. EMU was chosen for this study because it's a governmental university and has too many educational spaces to examine. This study is limited to faculties buildings and some spaces under these educational buildings. Auxiliary functions such as cafeterias, sports facilities and student service centers, which contribute to the overall learning experience, have been considered in a broader sense but not analyzed in detail. Future research should investigate the unique spatial

dynamics of different faculties and functions within university campuses to develop more specialized and adaptable color strategies.

1.5 Structure of The Thesis

This study is structured into five principal chapters. The initial chapter of the thesis encompasses various essential elements, including the problem description, the study's aim, the applied technique, the study's limits and the overall research structure.

The second chapter speaks to perceptions, psychology and relationships between colors. It is to form a literature review and general information about the study including theories of color and basic concepts of the operation of color.

Chapter three outlines the effects of color in educational spaces on spatial cognition and identification of educational spaces. It encompasses the definition and categories of educational spaces, the significance of color in educational settings and the correlation between color and the identification of selected educational spaces. The attributes of colors that facilitate recognition and comprehension are examined. Alongside the ideal color selections for establishing visually harmonious and readily identifiable educational settings.

The fourth chapter describes the methodology of the study, which covers the information about the selected examples and the case study which is EMU. The limitations of the case study, the observation tables and the methodology findings will be explained in this chapter.

The fifth and final chapter of the thesis encompasses the overarching conclusion and recommendations for prospective research endeavors related to the subject matter in the future.

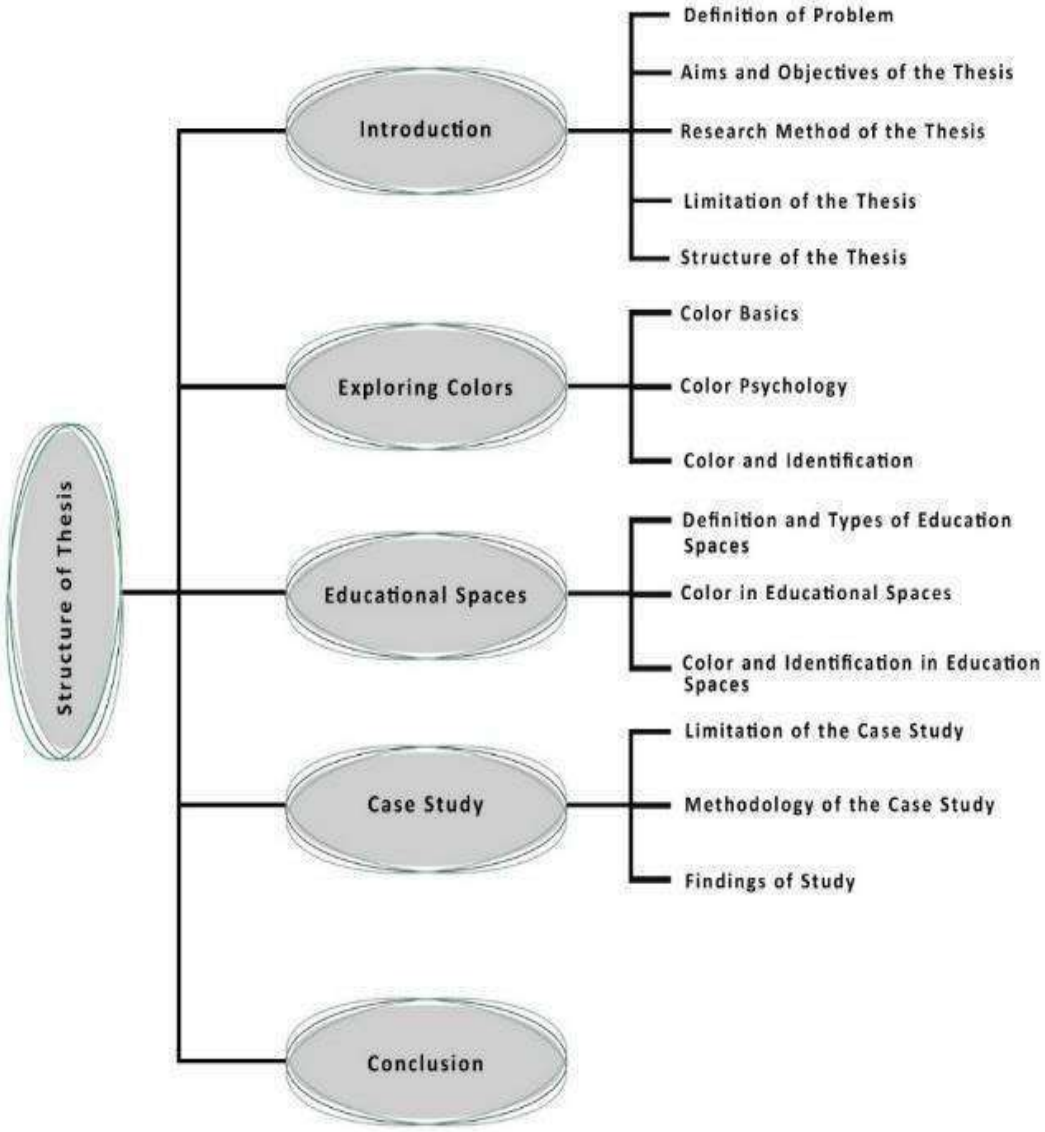


Figure 2: Structure of the Thesis

Chapter 2

EXPLORING COLORS

2.1 Color Basics

This chapter covers color's physical and psychological foundations and theories. It covers color basics like color mixing, color theories and color dimensions. The chapter covers color harmony, including schemes and groupings. The text goes beyond these basics to examine color vision and its significant psychological and physiological repercussions. Additionally, color qualities are examined to better understand its influence and relevance.

People see colors based on how objects' surface properties interact with light and how light reflected from objects interacts with their visual system (Aston et al., 2020).

Color is an experience produced only within the brain. Therefore, the perception of color is intrinsically tied to the interaction between light and our visual system (Polat, 2012).

Objects in specific situations become invisible without sufficient contrast or luminosity (Lizuka et al., 2022). Diverse surfaces absorb and reflect distinct wavelengths of light, leading to the impression of particular hues, as this sensory information is conveyed to the brain, producing the experience of color (Damka, 1983). This mechanism depends on selective absorption, which explains the coloration

of things; For instance, a red apple only reflects red light and absorbs all other visible spectrum colors, making it appear red (Vandergriff & McLean, 2008). The sense of color is entirely dependent on light reflecting off surfaces; in the absence of light, objects do not have any inherent color (Per, 2012).

A person's professional background or point of view can influence their perception of color. Although the majority of people consider color to be an attribute of both things and light, psychologists argue that our perceptions of color are influenced by subjective brain processes. These differing perspectives contribute to the shared understanding of color (Witzel et al., 2018). On the other hand, color is often a representation of a design concept that greatly affects the perceptual experiences of the finished architectural product from an architect's perspective, regardless of the different interpretations. Indeed, when seen through the lens of architecture, color serves as a design notion integral to the architectural language for conveying ideas (Bayık, 2001).

In the 17th century, Isaac Newton, a British physicist in a crucial experiment, showed that sunshine is made up of different colored light rays, each with its refractive characteristics (Fara, 2015; see Figure 3). This array of hues, known as the "sun spectrum," was subsequently projected onto a simple white screen (Per, 2012). Because different wavelengths of light interact with the human visual system in different ways, this experiment shows how light and color perception are fundamentally related. Light, whether it comes from the sun or any other man-made source, is just waves vibrating at different rates (Miller, 1997). By utilizing a prism to scatter light across a white surface, a spectrum is produced; the red light corresponds to the longest wavelengths, while the violet light represents the shortest (Per, 2012).

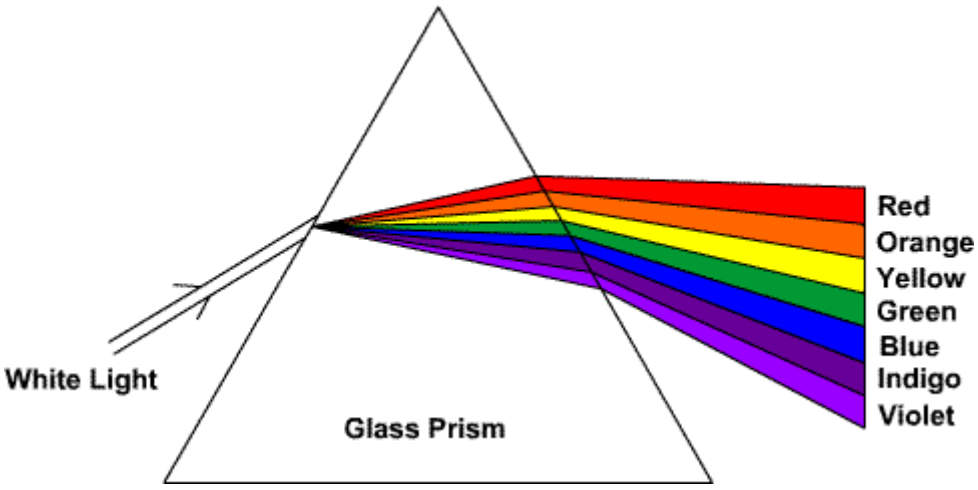


Figure 3: Color Spectrum (URL 1)

Color is subjective; different people from different walks of life have arrived at different theories about it through the years. Color, according to Mary C. Miller (1997), is something that only the brain can perceive.

On the other hand, Goethe depicts color as an essential part of nature in "Teaching Color," which engages the sense of sight directly. Different fields assign different meanings to color. For artists, color is a pigment; for physiologists, it's a property of radiant energy; and for psychologists, it's a perceptual phenomenon that arises in the mind. This multi-faceted comprehension highlights the intricacy and diverse understandings of color in different fields (Per, 2012).

2.1.1 Color Mixture

Color mixtures are categorized into additive (RGB) and subtractive (CMYK) methods, each serving distinct purposes. Additive mixing involves blending light colors, whereas subtractive mixing combines material colors like inks or pigments, highlighting the diverse approaches to color creation.

- **Additive Mixture (RGB color)**

Red, Green and Blue make up the RGB color space, an additive color system that was initially formed from color theory's founding work by Maxwell. A large variety of colors may be created with this method, which is utilized in many digital cameras, computer monitors, and smartphone apps. White light is created by combining red, green and blue light in an equal proportion. Modern digital color representation and processing are built around this additive color paradigm, which allows for accurate and varied color reproduction (Loesdau et al., 2014; see Figure 4).

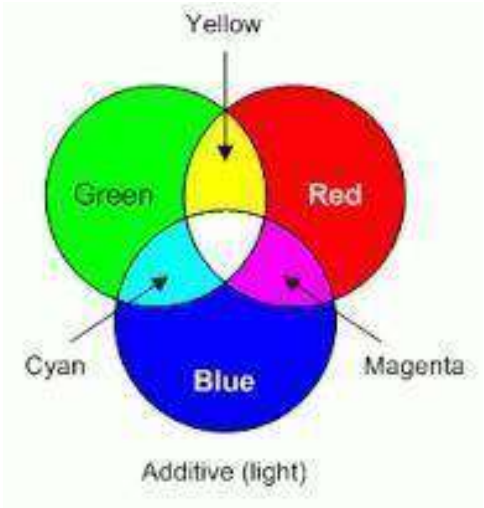


Figure 4: Principle of Additive Color Combination (Light) (URL 2)

The additive primaries have complementary colors of yellow, magenta and cyan. Keep in mind that white light can be produced by combining any of the additive primaries with their complement, as shown in Figure 5 below (Güley, 2014).

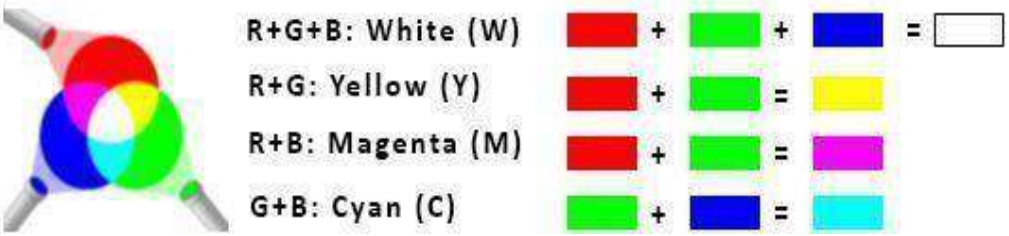


Figure 5: Primary and Secondary Additive Colors (Güley, 2014)

- **Subtractive Mixture (CMYK color)**

Cyan, magenta and yellow are primary colors used in printing and theater. They are made by subtracting white light to achieve certain colors. Printers make white by lowering the pigment content, which brings out the paper's inherent whiteness. The procedure exemplifies how CMY primary colors are additive (Burns, 2017).

Since printing systems can't generate perfect black, they add layers of black, hence CMYK, where K stands for black. More ink (pigment) darkens the image. More colored gels in front of a light darken it as light and specific hues are eliminated. Paintings are traditionally reproduced in color using 2D printers, which have poor color accuracy. The first issue is that their color spectrum is limited by their fixed set of inks, which usually contain cyan, magenta, yellow and black. A wider range of inks can overcome the limiting gamut, but only a certain amount can be deposited in a particular area. Exceeding the total ink limit causes image quality loss, ink blotting, or printer malfunction (Shi et al., 2018; see Figure 6).

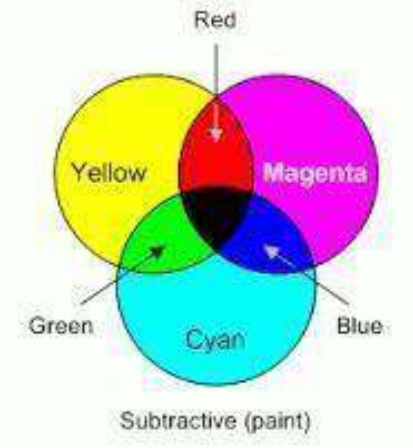


Figure 6: Subtractive Color (URL 3)

The complementary colors to the subtractive primaries are red, green and blue. Note that mixing any of the subtractive primaries with intermediate color will result in the effect illustrated below (see, Figure 7).

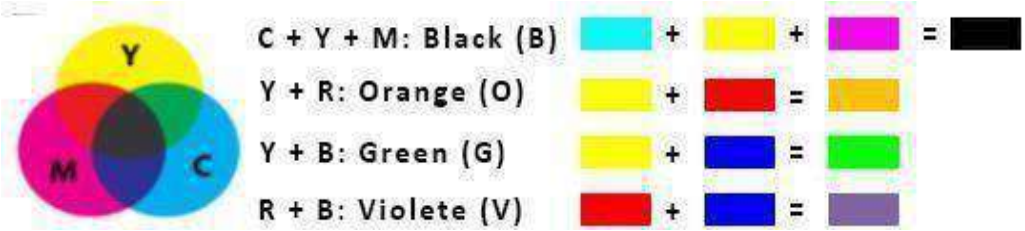


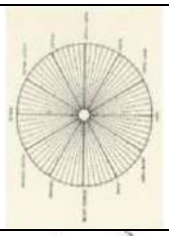
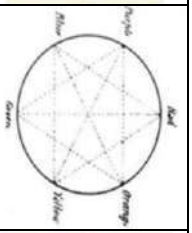
Figure 7: Primary and Secondary Subtractive Colors (Güley, 2014)

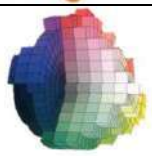
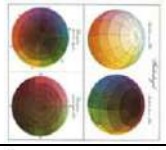
2.1.2 Evaluation of Color Theories

Many cultures and scientists have developed color theories throughout history to make sense of the world around them and understand how humans perceive colors. Numerous theories on color theory have been developed by practitioners in a wide range of disciplines, including chemists, painters, writers and poets (Güley, 2014).

This study examines color theory from historical to modern viewpoints, emphasizing the various color systems developed by scientists across multiple disciplines. The results and ideas from historical color theory investigations are compiled and displayed in Table 1 for reference and analysis.

Table 1: Evaluation of Color System and Theory (Güley, 2014)

Name	Period	Occupation	Starting Point of Color Wheel	Interest	Primary Colours	Color Wheel
Michel Eugene Chevreul	18-19th century (1786-1889)	Chemist	Psychology	Additive color mixture	Red, Yellow, Blue	
Wolfgang von Goethe	18-19th century (1749-1832)	Poet	Psychology	Additive color mixture	Red, Yellow, Blue	
Moses Harris	18th century (1766-1785)	Entomologist	Nature	Subtractive color mixture	Red, Yellow, Blue	
Sir Isaac Newton	17th century (1643-1727)	Physicist	Nature	Additive color mixture - Physics of color	Red, Yellow, Blue, Orange, Green, Violet Indigo	
Leonardo da Vinci	17th century	Artist and Scientist	Nature	Subtractive color mixture - Perception of color	Red, Yellow, Blue Black, Green, White	
Color Wheel in Nowadays	Nowadays	---	---	Subtractive color mixture	Red, Yellow, Blue	

Itten	19-20th century (1888-1967)	Teacher	Psychoanalysis	Subtractive color mixture	Red, Yellow, Blue	
Wilhelm Ostwald	19-20th century (1853-1932)	Chemist	Geometrical color model	Subtractive color mixture	Red, Yellow, Blue	
Albert Munsell	19-20th century (1858-1918)	Chemist	Chemical	Subtractive color mixture	Red, Yellow, Blue, Green, Purple	
Philipp Otto Runge	18-19th century (1777-1810)	Painter	Chemical (3D color)	Subtractive color mixture	Red, Yellow, Blue	
CIE	20th century (1931)	International Commission	Standardization	Additive color mixture	Red, Green, Blue	

2.1.3 Color Dimension

The three basic and unique characteristics of color are hue, chroma (saturation) and value (brightness). Chroma is the color's intensity or richness, whereas hue is the color's pigment. Highly saturated colors have a significant pigment concentration. On a neutral scale that runs from pure white to pure black (Fehrman & Fehrman, 2004), the value represents the degree of darkness or lightness (see, Figure 8).

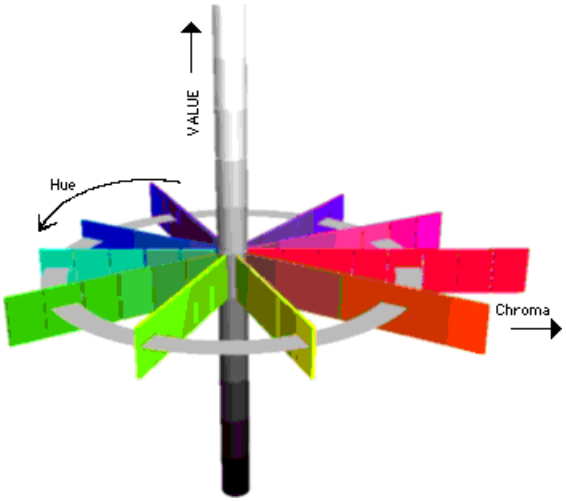


Figure 8: Dimension of Color (Gazineu & Rasband, 2017)

- **Hue**

Hue is a color term that denotes its chromatic quality. It enables humans to distinguish between colors, such as green and blue or red and yellow (Fehrman & Fehrman, 2004; see Figure 9). This dimension is represented by the color that we perceive, which shifts from yellow to red, blue and green as it moves around the outside edge of the color sphere. On the hue scale, colors can move both clockwise and counterclockwise; for example, a blue can shift to the red or the green side and become aqua. Similarly, red can be either more yellow (orange) or bluer (purple or maroon). Therefore, a yellow can be turned greener (chartreuse) or redder (orange).

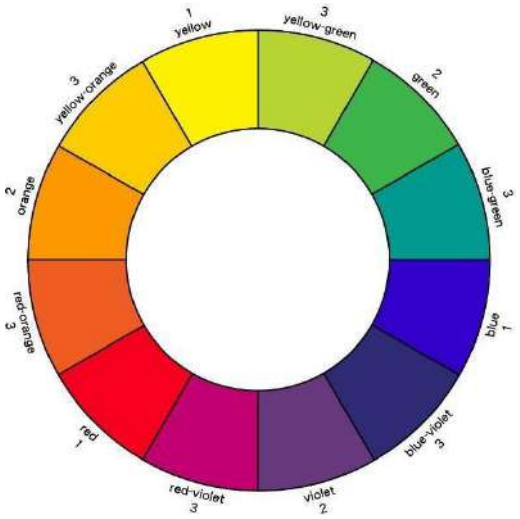


Figure 9: Basic Hue (URL 4)

- **Saturation (Chroma)**

The richness and intensity level of the hue, measured radially from the center of each slice, is sometimes indicated by chroma or saturation (Figure 10). Accordingly, it indicates how much pigment is contained in a color (Fehrman & Fehrman, 2004). By showing how far a color feels from white or gray, it helps us distinguish between vivid and muted colors. High saturation colors are less gray and include more pigment.

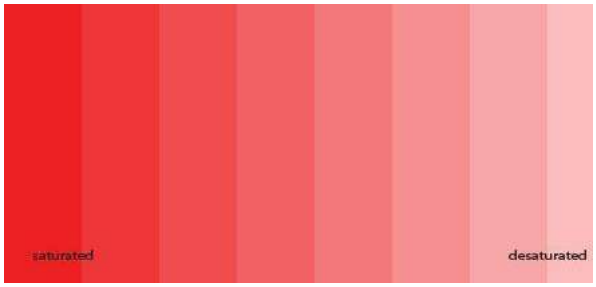


Figure 10: An Example of Saturation (URL 5)

- **Value (Lightness or Darkness)**

Value, sometimes referred to as brightness, is the second dimension and indicates how light or dark a color is (Fehrman & Fehrman, 2004). The color's brightness value, which ranges from white to black, indicates how dark or light the color is (Kim et al., 2014). Value varies vertically along the solid color, with white (value 10) at the top and black (value 0) at the bottom. The vertical axis between black and white is paralleled by neutral grays (Figure 11).

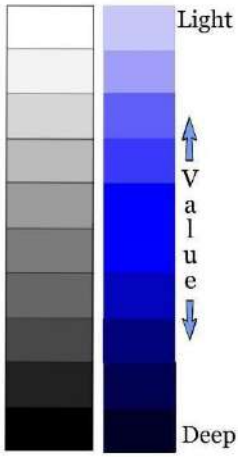


Figure 11: An Example of Color Values (URL 6)

2.1.4 Color Harmonies

In visual experiences, harmony seems to be aesthetically attractive. For the observer, harmony fosters an internal sense of balance and order. Harmony thus draws the audience in. Conversely, when anything lacks harmony, it is viewed as either disorganized or uninteresting. On the one hand, there are visual experiences that are so uninteresting that they fail to hold the viewer's attention. The latter will reject information that does not excite the brain. On the other hand, the spectator is unable to gaze at it due to the intensity of the visual experience. Anything that the human brain cannot identify is automatically rejected. The visual task requires logical

organization. Both visual interest and a sense of order are provided by the color harmony. Three categories of color harmony exist (Güley, 2014):

1. Hue Harmony: Hue harmony is derived from the color wheel. A basic monochromatic palette employs a single hue, whereas a spectrum of hues within 60– 90 degrees can produce either gradual or arbitrary contrasts. Colors that are distanced by 90 degrees or more provide enhanced contrast, merging analogy and contrast when encompassing a significant portion of the color wheel (Güley, 2014).

Hue harmony shapes perception and emotion in visual composition. Well-balanced colors create a seamless experience, while rigidity feels predictable and excess contrast overwhelms. The right balance keeps viewers engaged without fatigue.

2. Value Harmony: Value harmony is contingent upon the grayscale. Analogous values maintain minor alterations in chroma and color by concentrating on one or closely related value increments (Güley, 2014).

Value harmony enhances depth and structure in visual design. Balanced light and dark improve clarity, with strong contrast creating focal points and subtle shifts adding cohesion. Without it, images may feel flat or chaotic.

3. Chroma Harmony: Chroma harmony equilibrates analogy and contrast. Colors possessing identical chroma intensity are considered similar, although fully saturated colors diminish hue contrast. Complete harmony takes into account chroma, value, and hue regardless of whether only one element is altered (Güley, 2014).

Chroma harmony shapes an image's energy and mood. High chroma adds vibrancy, while lower chroma creates a muted, sophisticated look. Balanced saturation ensures visual appeal, preventing clashes or dullness.

2.1.4.1 Color Schemes

Color theories incorporate various color schemes that encompass color harmony. These schemes involve combinations of different color harmonies.

The color schemes, mostly used today are as follows:

- **Achromatic Color Schemes**

Achromatic colors, comprised of gray resulting from a blend of black and white, lack chromatic properties (see, Figure 12). These colors encompass varying degrees of lightness and darkness between white and black (Briggs, 2007). Achromatic colors, by definition, contain no distinct color and typically encompass shades of black, white, and gray (Güley, 2014).

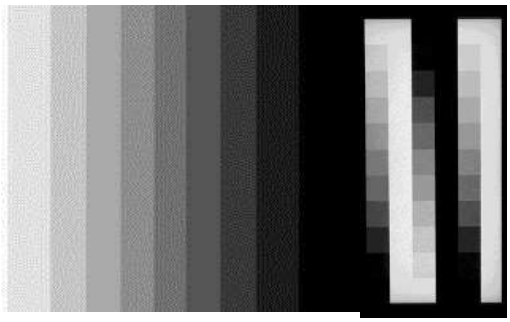


Figure 12: Achromatic Color Schemes (Güley, 2014)

- **Monochromatic Color Schemes**

A monochromatic color scheme is a palette that revolves around a single color and its various shades (see, Figure 13). By blending the chosen color with achromatic colors such as white, black and gray, using different tints, one can create a spectrum of light

or dark tones derived from the original color (Güley, 2014).

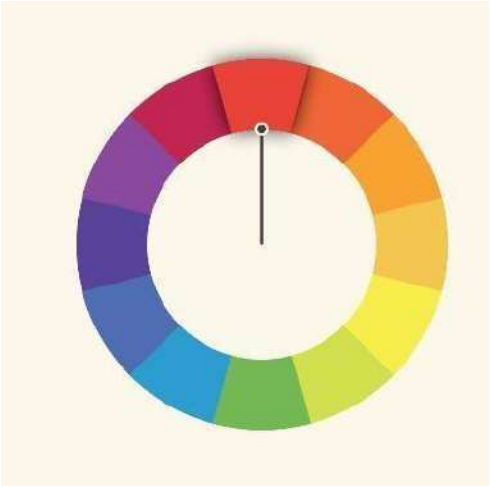


Figure 13: Monochromatic Color Schemes (URL 7)

- **Analogous Color Schemes**

Analogous color schemes are harmonies formed by utilizing adjacent colors to each other on the color circle (see, Figure 14). The closely situated analogous colors exhibit a robust appearance and establish a subtle harmony. Each color in this scheme incorporates shades of the adjacent colors. Typically, one of the chosen colors serves as the primary color, while the adjacent one functions as a supporting color. For instance, a harmony of analogous colors can be achieved with yellow-green, yellow and yellow-orange (Per, 2012).

Figure 14: Analogous Color Schemes (URL 8)

- **Complementary Color Schemes**

In the color wheel, two colors that are positioned distantly are deemed complementary and are referred to as contrasting colors. Contrasting hues amplify each other's intensity, enabling a dramatic expression of their fundamental attributes (Yılmaz, 1991). Colors that are exactly opposite one another on the color wheel make up complementary color combinations (Birren, 1987, p.35).

Every color can be complemented or contrasted by another color on the color wheel. For example, when one perceives complementary colors like green and red, orange and blue or yellow and violet, the eyes typically adapt to the contrasting hue. Eliminating a certain color from the color wheel will result in the remaining colors collectively producing the complimentary color. This phenomenon arises from the human eye's inherent need to seek the complementary color and in its absence, the eye often perceptually constructs it (Güley, 2014).

The overarching category of complementary color schemes can be further categorized into distinct sub-groups, each delineated as follows:

- *Directly complementary*

Colors that are positioned opposite each other on the color wheel are referred to as direct complementary colors. Examples include red-orange and purple-blue, red-orange and green-blue, purple and yellow, orange and blue, green and red, and red-purple and green-yellow. These hues consistently attract one another, and when positioned adjacent to one another, they amplify each other's impact. Nevertheless, the amalgamation of direct complementary contrast colors leads to a reduction in their impacts, producing a subdued look and with complete mixing, they may yield a gray hue (Gopinath, 2005; See, Table 2).

• *Double complementary (Tetradic-rectangle)*

Because it uses two complementary color pairs, the tetradic (double complementary) scheme is the most varied. Achieving harmony in this scheme can be challenging; using the four hues equally may result in a visually unbalanced appearance. Therefore, it is recommended to have one dominant color or a color that subdues the others to maintain visual balance within the scheme (Gopinath, 2005; See Table 2).

• *Split complementary*

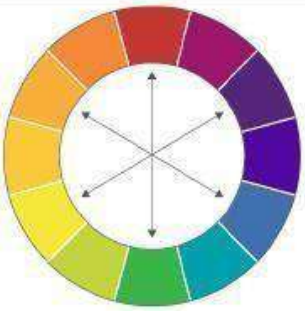
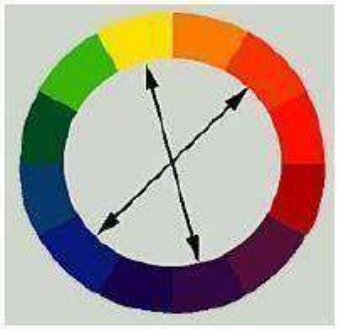
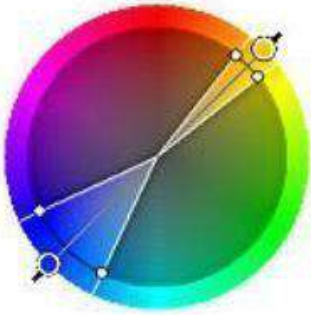
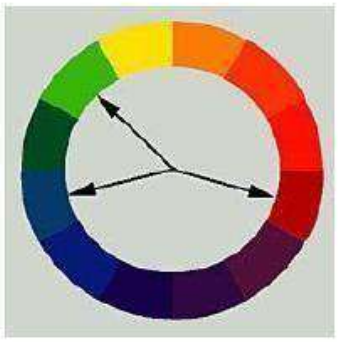
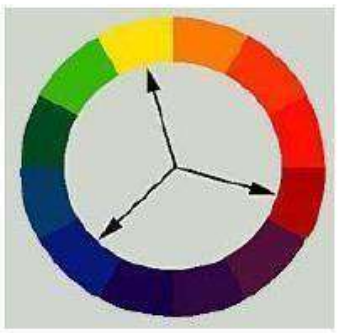
The split complementary scheme is essentially a modification of the traditional complementary scheme. In this scheme, a base color is paired with the two colors adjacent to its complementary color. This creates a high contrast effect, albeit without the intense tension found in the standard complementary scheme. One hue and the two colors on either side of its direct complement make up the split complementary scheme, which forms a 'Y' shape on the color wheel (Güley, 2014; See Table 2).

• *Triadic color*

Triadic color combinations consist of three hues that are evenly spaced from each other on the color wheel, typically with an angle of 120 degrees between each color (Myers, 1989, p.28).

The triadic color scheme involves using three colors that are evenly spaced around the color wheel. This scheme is favored by many artists as it provides a robust visual contrast while retaining richness and harmony. Compared to the complementary scheme, the triadic scheme is less contrasting, but it exudes a more harmonious and balanced overall appearance (Güley, 2014; See Table 2).

Table 2: Table of Complementary Color Schemes (Güley, 2014)

Complementary colour schemes		
Direct complementary		
Double complementary (Tetradic-rectangle)		
Split complementary		
Triadic colour		

2.1.4.2 Color Groups

A split color scheme divides into warm colors on one side and cold colors on the other (refer to Figure 15). The spectrum comprising orange, red-orange, yellow, yellow-orange, red, red-orange and red-purple is designated as warm colors, whereas the spectrum including green, yellow-green, blue, violet and blue-violet is referred to as cool colors (Yamaner, 2001).

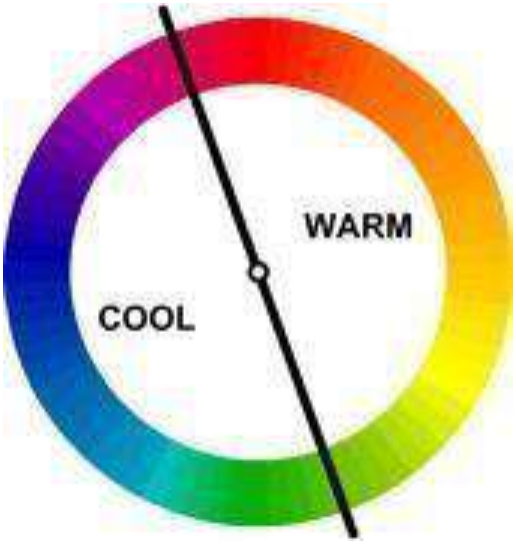


Figure 15: Cool and Warm Color Group (URL 9)

2.2 Human and Color Perception

Color, an essential aspect of visual perception, is crucial for humans to perceive and differentiate the three-dimensionality of objects. The process of human color perception occurs through three unique dimensions: physical, physiological and psychological elements of color. These areas offer distinct insights into color perception, each enhancing the comprehensive understanding of this complex process (Porter & Mikellides, 1976).

At the core of color perception is light—an essential component of the electromagnetic spectrum visible to the human eye. Light serves as the primary catalyst for seeing and observing color, with numerous pathways through which individuals perceive it, shaped by the surrounding environment (Faulkner, 1972). Whether emanating from natural sources like the sun or artificial light sources such as tungsten filament bulbs and LEDs, light rarely reaches the eyes directly from objects; rather, it is often reflected or transmitted by them.

Objects, devoid of inherent color, rely on reflected light for perception. The physical properties of materials determine whether light is absorbed, transmitted or reflected, thereby shaping the perceived color and visual characteristics of objects (Bayık, 2001). As aptly summarized by Porter and Mikellides (1976), "If we take light for granted, we can consider color as a property of objects."

Three-dimensional objects are converted into two-dimensional retinal images by the eyes, which function as information sensors. The brain then reassembles these images into a three-dimensional representation of the outside world (Kuehni, 1983). The complex relationship between the eye and the brain, often challenging to fully elucidate, underscores the intricacies of color perception. While the physical aspects of color—wavelength, reflection, absorption— may seem straightforward, the perceptual experience involves a series of complex effects (Kuehni, 1983).

The color perception process, encapsulating the effects of light, objects and the eye-brain relationship, intertwines with the psychological reactions of living beings. This dynamic interplay occurs predominantly within the mind, shaping the psychological and physiological responses of individuals. Like all animals, human beings react to

Color through their mental and physical systems, with the observer's mental and physical structure playing a pivotal role in this intricate phenomenon. Hering's thesis satisfactorily explains how our brains ultimately perceive color, while Thomas Young's idea clarifies how the eye processes color visually, the comprehensive understanding of color perception emerges as a multifaceted journey influenced by both external stimuli and internal cognition (Porter & Mikellides, 1976).

2.3 Effects of Color

Color plays a crucial role in shaping our lives, serving as a key factor in interpreting our surroundings and influencing our behavior through its informational and cultural significance (Martinson & Bukoski, 2005). Color, beyond its visual allure, possesses a profound ability to influence human emotions and behavior. The study of color psychology delves into the intricate relationship between colors and the psychological responses they evoke. Just as an artist strategically selects hues to convey a particular mood on canvas, the colors that surround us in our daily lives can significantly impact our emotional states and cognitive processes. Color impacts us both psychologically and physiologically (Martinson & Bukoski, 2005).

2.3.1 Psychological Effects of Color on Humans

The impact of color on people's moods and emotions is significant, influenced by emotional associations, individual feelings (Kaya & Crosby, 2006) and cultural factors (Martinson & Bukoski, 2005). Psychological responses to color often described qualitatively as anxiety, aggression or happiness, lack clear evidence regarding their effectiveness on human behavior (Bakker et al., 2013).

Kaya and Crosby (2006) emphasized the personal and emotional factors influencing color associations, with red denoting energy and enthusiasm, purple indicating fun and

creativity and blue embodying truth and tranquility. Shehata (2000) posited that orange signifies energy, yellow invigorates the intellect and green embodies harmony.

Despite extensive research on the psychological impacts of color, there is still insufficient understanding of its true influence on human behavior, resulting in incongruous findings (Tofle et al., 2004). Each color possesses distinct connotations, with globally recognized associations such as red, orange and yellow linked to fire, and blue, green and violet associated with cold oceans, dense forests and shadows (Fehrman & Fehrman, 2004).

While adults generally prefer colors such as white, black, grey and brown over children, these colors are often linked to negative emotions even in adults (Gaines & Curry, 2011). Neutral colors like white and grey, commonly used in spaces such as schools, hospitals and offices, can have adverse effects and should be considered (Dijkstra et al., 2008).

In Dijkstra et al.'s (2008) study, participants exposed to green-walled hospital room simulations experienced less stress than those in white rooms, especially those with low stimulus screening ability. Another phase with orange walls demonstrated that the orange room was more stimulating and appealing than the white room.

Kwallek et al. (1997) discovered that white offices resulted in higher dysphoria, anger and depression compared to red or blue offices. The lack of contrast and pigment in white can disrupt individuals with lower screening abilities, leading to lower productivity, more errors and reduced happiness for users.

2.3.2 Physiological Effects of Color on Humans

Gaines and Curry (2011) found that the color red enhanced the sense of smell, elevated blood pressure and pulse, and intensified muscle density. Conversely, exposure to the color blue led to a decrease in body temperature, loss of appetite and a slower heart rate. Positive effects on breathing and speech skills were associated with yellow and green, respectively, while orange and pink were noted for their comforting effects on circulation and the nervous system.

Every color and combination can impact not just emotions but also various physiological aspects, including brain waves, heart rates, blood pressure, respiratory rates, hormone secretions, reactions to stress and the autonomic nervous system and cerebral cortex where emotions reside (Martinson & Bukoski, 2005; Jin et al., 2009). Jin et al. (2009) specifically highlighted that the color red induced emotional changes and directly affected the parasympathetic nervous system activity, regulating blood pressure, heart rate and respiratory rates below normal levels.

The lightness and saturation of color also contribute to physiological responses (Gaines & Curry, 2011). Zemach, Chang and Teller (2007) noted that bright and highly saturated colors are more effective in eliciting changes in individuals. Variations in human vision, brain development and color interpretation can result in diverse physical responses among individuals.

2.3.3 Color Properties

Color plays a crucial role in shaping our emotions, perceptions and even physiological responses, making it an essential aspect of human experience. Each color carries unique meanings, evokes distinct feelings and holds cultural significance, influencing behavior and interactions in various domains such as design, art and environmental

psychology. As Gage (1999) states, "Color becomes a psychological and sensory connector simultaneously for individuals and their feeling space; thus, it affects the emotional and cognitive responses." The ability of colors to elicit emotions, from the passionate intensity of red to the calming serenity of green, underscores the importance of understanding their psychological and symbolic meanings (Chijiiwa, 1987). This knowledge helps individuals and industries harness color effectively to create desired emotional and cognitive effects. By recognizing the singular qualities of colors, will gain deeper insight into their impact on human behavior and perception (Kaplan & Kaplan, 1989).

The following are the characteristics of colors:

- **Red:**

Red is a powerful and evocative hue, symbolizing passion, intensity and vitality while significantly influencing human emotions and physiological responses. It captivates attention, accelerates metabolic processes and is often associated with youth, while variations like pink evoke romance and deep crimson exudes aristocracy (Chijiiwa, 1987). Martel (1995) describes red as the color of fervor and energy, enhancing alertness, focus and confidence. Additionally, Chiazzari (1998) connects red to strength, warmth, sensuality and assertiveness, while Vodvarka (2008) notes its effects on increasing heartbeat and breathing rate. Engelbrecht (2003) highlights red's influence on appetite and sense of smell, further demonstrating its stimulating nature. Moreover, research suggests that red light waves boost stamina and activate the heart, circulatory system and suprarenal glands, reinforcing its role in enhancing physical and emotional vigor (Zelanski & Fisher, 2003).

- **Yellow:**

Yellow, the color of sunshine and flowers, is energetic and cheerful and often associated with happiness and creativity. While its brightness can create a light and airy atmosphere, excessive exposure may become overwhelming (Chijiiwa, 1987). Pile (1997) notes that yellow is less aggressive than red and Morton (1998) describes it as the color of creativity, while Chiazzari (1998) links it to optimism, rational stimulation and even fear. Gold, a variation of yellow, symbolizes prosperity, idealism, and wisdom, further emphasizing its positive connotations. Additionally, yellow light waves are known to stimulate the brain and nervous system, enhancing logical awareness and muscle activation (Zelanski & Fisher, 2003), with Martel (1995) highlighting its unique ability to enhance muscle power.

- **Green:**

Green, a serene and bucolic hue, is deeply associated with nature, symbolizing life, health, growth and renewal. Bright green evokes images of spring and fertility, while dark green embodies the stillness of a dense pine forest, yet the color can also be linked to poison, envy and mildew (Chijiiwa, 1987). Chiazzari (1998) connects green to peace, harmony, sincerity and contentment, while Martel (1995) emphasizes its association with productivity, wisdom and belief. A survey conducted in Europe and the US found that green is widely linked to hope, youth and desire (Heller, 2009). Additionally, green has a calming and restorative effect, as its light waves help regulate the heart and circulatory system while also aiding in relaxation and certain medical conditions (Zelanski & Fisher, 2003).

- **Blue:**

Blue, the color of the ocean and sky, is both powerful and calming, commanding attention while exuding a sense of dignity and luxury in its darker shades and

youthfulness in its lighter tones (Chijiiwa, 1987, p.15). Chiazzari (1998) associates blue with peace, openness, faith and adaptability, while Martel (1995) connects dark blue with seriousness and deep thought. Studies conducted in the US and Europe reveal that blue is widely linked to harmony, loyalty, trust and sometimes melancholy, making it the most popular color among both men and women (Heller, 2009). Additionally, Verghese (2001) describes blue as a soothing and calming color, with Zelanski and Fisher (2003) noting that blue light waves lower blood pressure, alleviate pain and have a refreshing effect on the throat and thyroid glands. Furthermore, bluish-green light has medical benefits, reducing infections, soothing nervous system disorders and aiding immune system regulation (Zelanski & Fisher, 2003).

- **Purple:**

Purple, a regal and elegant hue, has long been associated with high society, exclusivity, and mysticism. Its rarity in nature has historically made it a prestigious color, as ancient purple dyes were symbols of distinction due to their scarcity and difficulty in production (Blaszczyk, 2012). Chijiiwa (1987, p.16) notes that while purple can sometimes feel synthetic due to its uncommon presence in nature, lighter shades have recently gained popularity in women's fashion. Psychoanalytically, purple embodies contemplation, creativity and enigma, blending the vigor of red with the tranquility of blue to create a balanced and inspiring effect. As Gage (1999) states, "Purple encourages reflection and creativity, rendering it a preferred color in artistic and contemplative settings."

- **Brown:**

Brown, a color deeply connected to nature, embodies stability, comfort and reliability, often evoking the earthy richness of the soil and the warmth of autumn foliage. Dark brown conveys luxury through associations with hardwoods and leather, while lighter

shades like tan and beige create a rustic, natural aesthetic in home furnishings (Chijiiwa, 1987, p.17). Birren (1987) asserts that brown fosters a connection to the earth, enhancing stability and harmony, making it a popular choice for warm and inviting interior spaces. Heller (2009) highlights brown's muted tones as symbols of heritage and endurance, while its effectiveness as a neutral grounding color that enhances the vibrancy of other hues. Frequently used in branding for natural and eco-friendly products, brown conveys reliability and authenticity, making it a versatile and practical color in both traditional and modern design (Morton, 1997).

- **Black and White:**

Black and white are contrasting yet equally powerful colors, each carrying deep symbolic and psychological meanings. White is often associated with innocence, tranquility and purity, yet it can also evoke sterility, winter and a clinical atmosphere (Chijiiwa, 1987, p.18). Conversely, black, representing authority, enigma and mortality, is linked to both elegance and darkness, making it a favored color among artists and those seeking sophistication (Chijiiwa, 1987, p.19). While black absorbs all hues, creating an intense and sometimes unapproachable presence, white embodies a balance of all spectral colors, symbolizing both positive and negative attributes (Ćurčić et al., 2019). The cultural and psychological perceptions of these colors vary across societies, influencing their use in interior design, where careful application is necessary to achieve the desired emotional and aesthetic effects.

2.4 Summary of Chapter 2

Color is complex and has far-reaching effects on many levels, from the physiological and physical to the psychological. This chapter examines the theories that form the basis of color theory, including those that deal with its three essential dimensions—hue, chroma and value—and their composition through additive and subtractive approaches. These ideas provide light on how light; objects and the human visual system interact to form our perception and interpretation of color. Different fields, including art, architecture and science, have different ways of perceiving color, which is influenced by both physical and mental processes and is inherently linked to light and selective absorption.

In addition to discussing schemes like monochromatic, complementary and analogous arrangements, the chapter delves into color harmony and how it contributes to visually attractive experiences. This post investigates the physiological and psychological effects of color. It elaborates on how, for example, blue causes a person to become calm, while red looks active. Understanding color can be difficult, especially when looking at different cultures or groups. The way people see and interpret colors can change from one society to another and can also vary by profession. Color, indeed, plays a crucial role in a plethora of human experiences concerning design, architecture and psychology as one irately indicated.

Chapter 3

EDUCATIONAL SPACES

3.1 Definition and Type of Spaces

In architecture and interior architecture, space is a basic yet intricate concept that has psychological, sociological, and perceptual components in addition to its physicality. Depending on the discipline, the concept of space is frequently interpreted differently. Space has been widely discussed in philosophical and architectural discourse as an abstract, three-dimensional continuum where events and interactions take place (Lefebvre, 1991; Norberg-Schulz, 1971). On the other hand, a place is generally regarded as a location that has acquired value via human experience and sociocultural relevance (Relph, 1976; Tuan, 1977).

In the debate surrounding architecture and interior design, space is viewed as an experience construct that is influenced by human perception, thought and behavior rather than just being an immaterial or one-dimensional thing. Pallasmaa (2012) asserts that the phenomenology of architecture emphasizes how light, sound, materiality and spatial structure affect human perception and interaction, implying that space is intricately linked to sensory experience. A deeper comprehension of how people occupy and interact with their surroundings is facilitated by the interaction of these components.

Understanding the function and accessibility of spaces requires dividing them into

public, private and semi-private sectors. Parks, squares and streets are examples of public areas that are open and unrestrictedly accessible to everyone (Gehl, 2011). These areas are crucial for building communal cohesion and a sense of shared identity because they promote social contact, democratic participation and urban vibrancy (Carr et al., 1992).

On the other hand, private places are reserved for private or restricted use, and entry is governed by institutional rules, membership requirements, or ownership. This category includes private homes, workplaces and personal spaces that offer settings catered to individual needs and privacy demands (Altman, 1975).

At the nexus of the public and private domains are semi-private areas that grant conditional access according to predetermined standards. Libraries, hospital waiting rooms, college campuses and business lobbies are a few examples of places where access may be limited to specific groups while yet being available to larger societal segments under specific circumstances (Carmona et al., 2008). These areas serve as transitional areas that mediate between public and private settings, and they are essential in striking a balance between inclusivity and exclusivity.

3.2 Definition and Levels of Education Spaces

Educational spaces are specific places, prepared to carry out teaching and learning activities in the best conditions. These spaces distributed in a school center are educational because they are used for cognitive formative situations, for example, the development of activities or attitudes.

Early childhood education, elementary school, middle school, and high school are the typical components of a formal education system. From Level 0 (pre-primary school)

up to Level 8 (doctoral), there are nine distinct tiers of educational attainment recognized by the International Standard Classification of Schools (ISCED) system put out by UNESCO. Generally, the following table introduces the main concepts, although terms and ages may vary in different places:

Table 3: Different Levels of Education

Level of Education	Education Stage	Typical Places of Study
Childhood Education	**Pre-primary education**	Early childhood education centers kindergartens or other similar institutions
Primary Education	**Primary education**	primary or elementary schools
Secondary Education	**Lower secondary education**	lower secondary schools or middle schools
	Upper secondary education	secondary schools or high schools
	Post-secondary non-tertiary education	This level can include a variety of institutions, such as vocational training centers, technical schools, or other post-secondary non-tertiary institutions
Higher Education	**Short-cycle tertiary education**	Typically offered in tertiary education institutions, which can include universities, polytechnics, or other similar institutions
	Bachelor's or equivalent level	Offered at universities, colleges, campuses, and other higher education institutions providing bachelor's degree programs
	Master's or equivalent level	universities and other higher education institutions offering master's degree programs
	Doctoral or equivalent level	universities and research institutions offering doctoral programs leading to a Ph.D. or its equivalent

3.2.1 Universities / Campuses

Campus – a complex consisting of buildings with a common denominator, such as property ownership (an administrative block). Recently, the term campus also appears in connection with the naming of non-school (especially corporate) areas (Šaling et al., 2008). However, this term still predominantly refers to a grouping of buildings

belonging to a university, where the common denominator is the university – the rectorate (main building), faculties, dormitories, lecture halls and auditoriums, libraries, laboratories and other buildings, such as administrative buildings. The university campus also consists of recreational areas, parks, water features, gardens and other academic and non-academic facilities. The area of such a campus can reach several tens of hectares. The campus must consist of a network of spaces that support the student community (Johnson, 2012) and strengthen the relationships within it (Winks et al., 2020).

3.2.2 Main Spaces of Universities/Campuses

Universities and college campuses serve as vibrant ecosystems where academic, social, and personal growth converge. To understand the dynamic nature of campus life, one must have a solid understanding of the main areas and spaces of these institutions. The key elements that influence the physical landscape of universities are examined in this study, including: 1. spaces for education and learning, 2. knowledge resource centers and libraries, 3. social areas and student services, 4. service and support areas, 5. staff and administrative areas, 6. retail and commercial spaces. By looking at these important aspects from the perspective of previous studies, we hope to gain a thorough grasp of the complex environments that make up universities. The theoretical frameworks of campus development and design are enhanced by this analysis (Colding & Barthel, 2017; Mulrooney & Kelly, 2020).

Table 4: Campus Spaces and Functions

Category	Subcategory	Details	References
1. Spaces for Education and Learning	1.1 Lecture Halls and Classrooms	Conventional classrooms for teacher-centered learning; adaptable environments with modular setups. Large lecture halls for visibility, acoustics, and multimedia use.	Oblinger (2006); Jamieson (2003); Temple (2007)
	1.2 Customized Learning Environments	Studios for arts/design; labs (wet, engineering, computer, medical) for hands-on learning; workshops for prototyping.	Cuff (1991); Prince (2004)
	1.3 Spaces for Research and Development	Research labs by discipline, research centers for collaboration, maker areas with 3D printers, and high-performance data centers.	Schoen (2015); Martin (2015); Sterling (2013)
2. Knowledge Resource Centers and Libraries	2.1 Conventional Library Areas	Reading rooms for quiet study; special collections for historical documents and rare books.	Given & McTavish (2010); ACRL (2018)
	2.2 Collaborative and Digital Environments	Digital resource centers, information commons, group study rooms, and research support areas.	Brown (2006); Beagle (1999); Applegate (2009)

3. Social Areas and Student Services	3.1 Centers or Student Unions	Lounge areas, cafeterias, student organization offices, event and meeting rooms for activities.	Astin (1993); Tinto (1993); Inkelas & Soldner (2011)
	3.2 Facilities for Health and Wellbeing	Counseling centers for mental health, and health clinics for medical care and wellness.	Bensimon (2007); NIRSA (2008)
4. Service and Support Areas	4.1 Toilets and Sanitation Facilities	Public restrooms with ADA compliance, gender-neutral restrooms, and shower facilities.	MacDonald (2006); Case et al. (2012); McKinney (2006)
	4.2 Areas for Maintenance and Cleaning	Janitor closets for cleaning supplies and maintenance workshops for infrastructure upkeep.	Alexander (2009); Orr (2002)
5. Staff and Administrative Areas	5.1 Offices for Administration	Registrar's office for student services, financial aid, and bursar's office for billing and counseling.	Terenzini & Pascarella (2005)
	5.2 Offices for Faculty and Staff	Departmental offices for collaboration, and faculty lounges for informal meetings and relaxation.	Schoen (2015); Temple (2007)
	5.3 Conference and Meeting Spaces	Small and large conference spaces for meetings, seminars,	Jamieson (2003);Inkelas &

		and events with audiovisual facilities.	Weisman (2003)
6. Retail and Commercial Spaces	6.1 Dining Halls and Cafeterias	Main dining halls for diverse food options and coffee shops for casual gatherings and study.	Astin (1993); Tinto (1993)
	6.2 Services for Retail	Campus bookstores for academic and branded items; convenience shops for snacks and essentials.	Stone & MacCorkle (1999); Weerts & Ronca (2008)
	6.3 Printing and Copies	Centers for printing, scanning, and photocopying services.	Beagle (1999)

3.3 Color in Educational Spaces

The term "educational environment" refers to any setting where people are exposed to new information, be it from a literary, scientific, or athletic perspective. These areas change depending on who is using them—students, readers or researchers, for example. In a conventional educational trajectory, one begins in kindergarten, continues through elementary, middle and high school and then finishes with college. Libraries (both public and private), laboratories, ateliers (both public and private) and schools are all examples of such places. Making sure that students can relax and enjoy themselves while engaging with material and activities is one of the primary goals of good design in the classroom. The impact of these settings is affected, in part, by the colors used distinct from the others, having the power to affect the occupants (students, researchers, etc.) in both good and bad ways.

3.3.1 Relevance of Colors in Educational Spaces

The effect of color on individuals extends beyond its literal meaning; it shapes perception, emotional responses, information transmission and even cognitive processes, profoundly impacting various aspects of life (Elliot & Maier, 2014). In educational settings, color plays a crucial role in shaping the learning experience, as studies have shown that specific colors can enhance concentration, memory retention and mood (Küller et al., 2009).

Research suggests that color preferences, sensory responses and physiological reactions significantly influence learning environments. For example, warm tones such as red and yellow can enhance creativity and stimulate excitement, while cool colors like blue and green promote focus and relaxation (Engelbrecht, 2003). These effects make color an essential tool in designing effective educational spaces.

Multiple academic studies and theoretical perspectives explore the complex impact of color on students across various age groups and cognitive abilities. For younger children, certain colors are associated with developmental stages, with brighter hues fostering engagement and recognition (Wilkins et al., 2009). Moreover, students with attention disorders, such as ADHD, respond differently to specific shades; research suggests that muted and pastel tones, including lavenders and blues, can create a calming effect, aiding concentration and reducing hyperactivity (Hanley et al., 2017).

Additionally, color influences brain function by affecting neural responses and visual processing (Kaya & Epps, 2004). The strategic use of color can enhance learning by improving visual clarity, reducing stress and increasing cognitive efficiency in classroom settings. Understanding the subtleties of color psychology enables

educators and designers to create optimal learning environments that support student success (Stone, 2003).

By embracing the principles of color psychology, the design of learning spaces can be significantly improved, fostering an atmosphere that supports educational growth and well-being.

Color is an important part of design because it has great effects on our bodies and minds. Studies show a connection between how well kids do in school, how they feel, and what colors they like (Gaines & Curry, 2011). Some students, especially those who have trouble paying attention or have mental illnesses, are more sensitive to colors in the classroom because of how they affect their senses and eyes (Freed & Parsons, 1997). It is thought that preschoolers like warm colors more than cooler ones (Engelbrecht, 2003).

In research on disabled students in Germany, Banaschewski et al. (2006) found that their capacity to distinguish between colors was compromised. Results from this study, which connected color to psychological and physiological responses, showed negative alterations in blood pressure, brain activity and eye strain (Morton, 1998).

For example, exposure to red may increase blood pressure and heart rate, while exposure to blue tends to decrease appetite, body temperature and pulse rate (Engelbrecht, 2003). While some of these effects pass quickly, others persist over decades (Morton, 1998).

According to Torrice and Logrippo (1989), children who are more active like cool-

colored surroundings, whereas those who are less active like warmer hues. Research indicates that pupils' learning results may be impacted by color (Gaines & Curry, 2011). Different learners have different preferences; some may find bright colors overwhelming, while others may be drawn to them. Academic performance is enhanced by color stimulation in learning environments, which has been connected to better attention and motor processes (Gaines & Curry, 2011). According to American Navy research, accidents decreased by 28% after adding color (Engelbrecht, 2003). On the other hand, monotonous environments resulted in restlessness, elevated emotional responses, difficulties concentrating and impatience, whereas white or off-white environments caused a 25% loss in human performance (Engelbrecht, 2003).

The educational environment is essential for societal advancement, influencing students' values, conduct and community involvement. The educational environment profoundly influences students' learning experiences in modern education (Fahmy, 2007). Fahmy (2007) characterizes the learning environment as comprising diverse external physical and human elements that affect the speed and efficacy of learning.

Abdullah (2007) emphasizes the school climate as a factor influencing student examination scores and attendance. As previously said, color significantly influences educational settings, capable of enhancing or detracting from the learning experience. Therefore, it is essential to investigate techniques for improving these environments. Informed by insights from scholars in the discipline.

3.3.2 The Functions and Purposes of Color in Educational Spaces

Color is a fundamental element in the design and aesthetics of educational environments, significantly influencing learning outcomes. Research indicates that color plays a crucial role in enhancing cognitive function, shaping behavior and

supporting emotional well-being in students (Engelbrecht, 2003; Read et al., 1999). The psychological impact of color in learning spaces has been widely studied, revealing that specific colors can improve attention, reduce stress and enhance memory retention (Küller et al., 2009). Additionally, the strategic use of color in classroom design has been linked to increased motivation and academic performance (Barrett et al., 2015).

- **Effects on Cognition and Emotion**

Colors substantially influence cognitive processes. Brooker and Franklin (2016) discovered that some colors can improve children's cognitive function, indicating that an appropriate color palette can facilitate learning and memory retention. It is found that warm colors include red and blue and it has a stimulating effect and gives a friendly impression for creating an environment that attracts the mood of the students and participation. This is very beneficial primarily for school colors in getting the pupils involved (NorvaNivel, 2024). On the other hand, dry and cool shades of blue and green speak to peace and concentration improvement, which can be used well in subjects where greater focus is required: math or science subjects (NorvaNivel, 2024).

- **The Learning Environment and Ergonomics**

The ergonomic design of learning spaces is a key functionality of the learning process in which the thoughtful application of color emerged. For Gaudiot and Pernão (2020), color and the built environment serve to enhance cognitive processes and improve student well-being, leading to a successful school record. It therefore allows students to perform better in their studies by appropriately using color to aid in lowering stress and anxiety (Gaudiot & Pernão, 2020).

- **Influence of Behavior**

Moods and behavior are affected by color. Engelbrecht (2003) explains that one-way colors affect student behavior is in terms of their behavior in the classroom. More precisely, warm colors are said to increase a feeling of vigor and excitement while cool colors are believed to promote calm and bring peace and less stress. To avoid overstimulation, it's crucial to balance the usage of color. Vibrant colors like orange and red should be used sparingly and balanced with relaxing hues because overuse of them might cause anger and anxiety (NorvaNivel, 2024).

3.3.3 Color in Different Levels of Education

- **Color in Early Childhood Education**

Barrett and Zhang (2009) found that 5–to 12-year-olds prefer red, orange, yellow, and green in schools. Classroom kids also appreciate violet, white, black, and gray. These colors decorate the classroom's ceilings, walls, floors, panels, chairs, and bulletin boards. Researchers, designers, and architects who care about children choose these colors for classrooms. They also recommend using natural colors in kid-friendly spaces since youngsters prefer variation. The classroom's walls, floors, ceilings, and furniture are painted in these colors (Read, 1997).

- **Color in Primary and Secondary Education**

In elementary and secondary schools, choosing classroom painting colors greatly affects the learning environment. Al-Baghdadi (2015) stresses that builders and designers must understand how colors affect students. He states that vibrant orange is a popular classroom color because it inspires pupils, especially in winter when school is in session, and provides warmth and comfort.

Engelbrecht (2003) emphasizes classroom color variety. If all walls are the same color,

students may feel nervous and exhausted. Also, he suggests employing a range of colors, especially blue or green behind the teacher, to assist students relax and reduce pain. This version aims to make learning more relaxing for students.

Choosing classroom color schemes based on scientific principles can enhance engagement and productivity in higher education.

1. Increased Activity and Productivity: Birren's (1987) study found that color coordination trials in educational settings can boost student activity by up to 25%. Color improves learning environments and boosts cerebral stimulation and long-term attention, according to these studies.
2. Clear Space: Using different colors for space can help schools find important parts of the learning setting. This makes it easier for teachers and students to move around the classroom.
3. Take it easy on your eyes: Too much bright light can strain the eyes, making it hard to concentrate and feel bad. Engelbrecht (2003) says that painting the walls of a classroom with soothing colors can help lower blood pressure and eye strain.

Additionally, the different purposes and activities of colors help students become more focused and active while also decreasing emotions of anxiousness and sluggishness.

- **Color in Higher Education**

To investigate the psychological impacts of color on campus, Sevinc and Kelechi (2004) carried out a thorough investigation that involved both undergraduate and graduate students in a variety of university settings, such as social, recreational, and educational areas. The research's conclusions offer important new information about how color affects learning settings in the following ways:

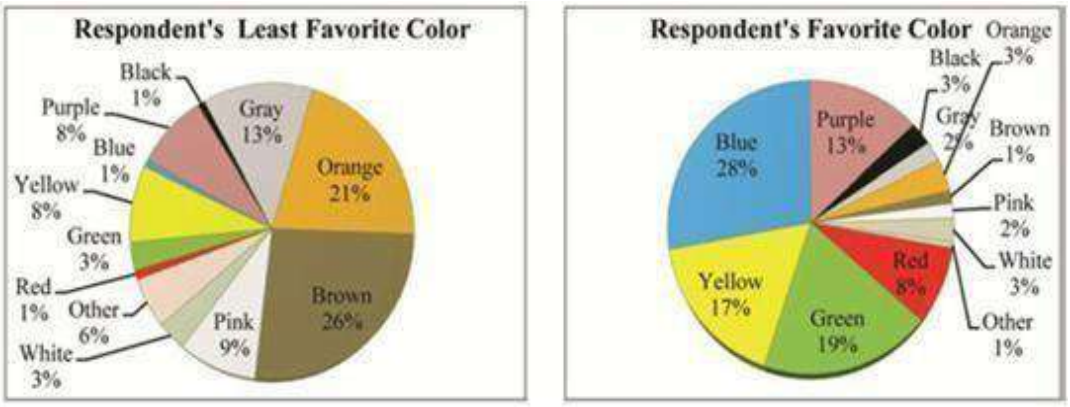


Figure 16: The participants' statistical data (Sevinc & Kelechi, 2014)

The results are consistent with those of Ching (2014), who noted that hues such as red, orange, and violet-red have a tendency to provoke powerful emotional emotions in a place as well as physiological reactions such as deep breathing and raised blood pressure. Personal interviews were used in a study at the Academic of Leeds to investigate the impact of color specifically in academic settings. According to the findings of this study, green is a hue that encourages children to feel calm and happy (Harleman & Billger, 2004). It's important to note that during the study, other influences were taken into account to lessen the psychological impact of colors.

3.3.4 Color Suggestions for Functions of Educational Spaces

The intelligent application of color in educational settings is essential for effective interior design, as it significantly influences learning, behavior, and emotional well-being. Research indicates that color choices in educational spaces should align with their specific functions and consider the psychological impacts on occupants, thereby fostering a comprehensive learning environment that addresses the developmental, cognitive, and emotional needs of both students and educators.

- **Classrooms and Lecture Halls**

These spaces require a balance between calmness and stimulation to maintain student engagement and focus. Cool colors such as blues and greens are recommended, as they

reduce stress and promote concentration and analytical thinking. Light greens and soft blues can create an environment that is both tranquil and intellectually stimulating. However, the overuse of vibrant colors like bright reds or yellows may be overly stimulating and hinder productivity. Pale yellows and golden hues can add gentle warmth, enhancing the aesthetic appeal (Baper et al., 2021).

- **Laboratories**

Spaces dedicated to scientific work benefit from colors that enhance rationality and precision. A combination of blues and greens is effective, as blue is associated with clarity and focus, supporting perceptual accuracy and concentration. Green, symbolizing growth and nature, is particularly suitable for life sciences laboratories. Neutral tones like browns or beiges can complement these hues, addressing blank spaces without causing distraction (Diachenko et al., 2022).

- **Auditoriums**

Performance spaces are enhanced by colors that convey dignity and elegance, such as violet, maroon, navy and warm neutrals. Darker colors can manage the visual scale of a large area, making it feel more intimate and cohesive. Warm neutral colors are soothing to the eye and do not interfere with performances or presentations, creating a focused ambiance when used appropriately (Naz, 2024).

- **Corridors and Staircases**

Transitional spaces like corridors and staircases significantly impact the overall feel of an educational building. Fresh colors such as green, blue and magenta can prevent monotony between classes by maintaining a lively and visually stimulating environment. Incorporating school colors can strengthen institutional identity and pride. Light blue and green tones have a calming and refreshing effect, making narrow spaces feel larger and less confined (Baper et al., 2021).

- **Public Restrooms**

To create a sense of cleanliness and comfort, public restrooms should feature a palette dominated by whites and blues. White is universally associated with cleanliness and pairs well with soft blues that evoke calmness and tranquility. These colors also make the space feel more expansive and less claustrophobic. Regular geometric designs on floors or walls can help individuals who are younger or more sensitive manage visual stress (Diachenko et al., 2022).

- **Cafeterias and Dining Areas**

Dining spaces benefit from warm colors such as orange, red, and lime, which stimulate appetite and energy. These hues create a welcoming atmosphere that encourages social interaction. However, it is advisable to avoid blue and yellow-green tones, as they are less associated with food and may suppress appetite. Moderate use of dark brown can add warmth and stability to the design (Springer, 2022).

- **Media Centers and Libraries**

For areas dedicated to reading and research, calming colors like light green, peach, and cream are ideal. These tones help reduce stress and enhance concentration, making them suitable for prolonged periods of study. Bright or bold colors should be avoided, as they can be distracting. Instead, neutral tones complemented by soft pastels create a soothing and inviting atmosphere (Springer, 2022).

Table 5: Color Recommendations for Educational Environments

Section	Color Recommendation	Effect
Classrooms and Lecture Halls	Cool colors (blues, greens), Pale yellows, Golden hues	Reduces stress, Promotes concentration and analytical thinking, Creates a tranquil yet stimulating environment
Laboratories	Blues, Greens, Neutral tones (browns, beiges)	Enhances rationality and precision, Supports perceptual accuracy and concentration, Suitable for life sciences
Auditoriums	Violet, Maroon, Navy, Warm neutrals	Conveys dignity and elegance, Manages visual scale, Creates a focused ambiance
Corridors and Staircases	Green, Blue, Magenta, Light blue, Light green	Prevents monotony, Maintains a lively atmosphere, Strengthens institutional identity, Makes spaces feel larger
Public Restrooms	Whites, Soft blues	Creates a sense of cleanliness and comfort, Evokes calmness and tranquility, Makes the space feel expansive
Cafeterias and Dining Areas	Orange, Red, Lime, Moderate dark brown	Stimulates appetite and energy, Creates a welcoming atmosphere, Encourages social interaction
Media Centers and Libraries	Light green, Peach, Cream, Neutral tones, Soft pastels	Reduces stress, Enhances concentration, Creates a soothing and inviting atmosphere

3.4 Identity

Identity encompasses both physical traits and social situations and is molded by experiences and social interactions. This idea is dynamic and ever-changing, changing depending on context and culture. The term "identity" often refers to the distinctive qualities that set one person, thing, or idea apart from another. Identity is the collection of unique characteristics that make one entity apart from another in social and physical circumstances, according to Sargın (1989, p. 63). This approach emphasizes that identity is influenced by one's surroundings and experiences in addition to one's personal traits (Herrle & Wegerhoff, 2008).

The unique characteristics and attributes that lend a form to its identification and uniqueness are referred to as identity in architecture. Even when a structure changes, its fundamental characteristics stay the same, making it possible to recognize it nevertheless. The essential qualities of a form can preserve architectural identity even when its dimensions alter or new features are added or deleted. According to Ching (2014, p. 49), people can use their knowledge of similar structures to mentally reconstruct an altered form. According to this, architectural identity is a physical and perceptual phenomenon (Abel, 2017).

Identity is given to architectural elements through the manipulation of their inherent properties. Several properties contribute to the identity of interior architectural forms:

3.4.1 Shape

In architecture, form is a fundamental element since it establishes the contour or shape of an object. The configuration of a structure determines its stability and acceptance most of all. While irregular forms expose asymmetry and uncertainty, regular forms,

distinguished by symmetrical and homogeneous structures, usually show more stability (Ching, 2014, p. 49). Shape is intricately connected to human cognition, since individuals correlate particular shapes with distinct functions and meanings, hence reinforcing identity (Malnar & Vodvarka, 2004). The degree of symmetry and complexity further delineates a shape's individuality, affecting its perception within an architectural framework (Herrle & Wegerhoff, 2008).

3.4.2 Form

Another distinguishing quality is form, which expresses an object's three-dimensional aspect including its mass, volume, and spatial orientation. Forms keep their visual coherence through additions and subtractions, therefore preserving their identity even when changed in scale or composition (Ching, 2014, p. 49). Whether horizontal or vertical, form also affects spatial experience and identity by means of orientation (Herrle & Wegerhoff, 2008).

3.4.3 Dimension

Architectural identity is much influenced by dimension since it defines quantifiable characteristics such height, width, and depth. Modifications in dimension can either maintain a structure's identifiable category or change its identity. Long vs short and wide vs narrow layouts as well as proportion help to define how a form is seen in respect to its surroundings (Herrle & Wegerhoff, 2008.). Another crucial determinant of architectural identity is height, which shapes spatial size and human interaction (Abel, 2017).

3.4.4 Color

Architectural identity depends on color, which also shapes recognition, emotion, and environment. As Ching (2014, p. 34) notes, one of the most unique qualities of a form, setting, distinguishes it from its surroundings: color. Warm and cold groupings of color

appeal to various emotional reactions and spatial impressions (Malnar & Vodvarka, 2004). Furthermore, influencing the psychological and visual effect of a space is color themes including monochromatic, similar, and complimentary schemes (Abel, 2017).

3.4.5 Texture

Another important element is texture, which defines the surface quality of a material and determines how light interacts with it, therefore influencing its appearance and identification. Ching (2014, p. 34) divides texture into two main forms: reflecting quality and surface quality. Smooth and rough textures are further divisions of surface quality; although rough textures offer depth and a tactile dimension, smooth surfaces produce a polished and refined look. matte and glossy textures reflect light and spatial perception, therefore influencing reflective quality (Herrle & Wegerhoff, 2008).

3.4.6 Material

Architectural identity is shaped in great part by material choice since it controls the structural, tactile, and visual aspects of a place. Ching (2014, p. 34) underlines how mostly the components of an element define its identity. While synthetic materials like glass, concrete, and steel express modernism and invention, natural elements like wood, stone, and clay transmit legacy and warmth (Abel, 2017). Furthermore, the finish of the material—whether polished or raw—much influences its impression, therefore providing still another level of architectural identity (Malnar & Vodvarka, 2004).

3.4.7 Smell

Though sometimes disregarded, smell is a fundamental component of architectural identity and helps create spatial connections and sensory experiences. Henshaw (2014, p. 15) notes that particular smells in a surrounding might arouse ambiance and emotional reactions. Strong or subdued olfactory ambiance affects spatial memory and

identification by means of spatial resonance (Malnar & Vodvarka, 2004). Furthermore, affecting user experience and perception is the mood generated by smell, whether it calms or energizes.

3.4.8 Sound

Through effects on acoustics and spatial perception, sound also significantly shapes architectural identity. Pallasmaa (2012, p. 53) notes that one's sense of spatial distance can be improved by audio signals. Whether high or low, resonance influences sound quality and reflection inside a space (Herrle & Wegerhoff, 2008). Quiet or noisy, acoustic atmosphere significantly affects user experience and functionality, so stressing the need for sound design in architecture (Malnar & Vodvarka, 2004).

A building's identity is influenced by its form, dimensions, color, texture, scent, sound, and material, among other attributes and characteristics. Architectural forms can undergo transformations that allow them to keep or develop new identities while staying true to their core. Architects can weave distinctive and easily identifiable shapes into the complex fabric of architectural identity by manipulating these qualities.

3.5 Summary of Chapter 3

The discussion of multidimensional spaces which generally, in architecture, education, and identity, attempt to bring precision and not at all ambiguities to the dimensions of spaces in which the person rests. Three dimensions, not two, are for some people the existence of space in relations between humans and things. There are utilizations and gains in public, private, and semi-private spaces too. We can all use all of them to improve our lives. Important architectural features like physical, perceptual, directional, and integrated spaces all play a role in how people move, communicate, and achieve their goals. Campuses often have a mix of academic, social, and leisure facilities to make it easier for people to learn and grow. The chapter also talks about how race affects the environment in the classroom and how that affects students' thoughts, actions, and feelings.

Warm colors, like orange and yellow, make people more active, while cold colors, like green and blue, make people calm down and focus use of color can transform a library or lab or a classroom into a fun, energizing space. How it functions may be understood as the dynamic result of the aggregates of sensory qualities following such study of the building itself in terms of form and sensory traits. In the end, these are all indicators of how thoughtful design offers the capacity to make a place that works and stands for some form of usability.

Chapter 4

CASE STUDY: USE OF COLOR AT EASTERN MEDITERRANEAN UNIVERSITY

The main focus of this study is on how color is used in different parts of educational spaces, like classes, lecture halls, labs and more. Its goal is to show how important it is for interior architectures and users to work together to choose color schemes for educational places in order to make those spaces better. The color of an educational place has a big effect on the learning environment. But in many schools, the effect of color isn't thought about enough; decisions about color are often made after the fact instead of being an important part of the planning process.

Color is one of the first things people notice in schools. If interior architects and users collaborate to choose classrooms, libraries and other space color schemes during design, the desired learning environments can be created, improving both their aesthetic appeal and functionality and leading to a more satisfying and effective educational experience.

For this study, the educational spaces at EMU have been chosen as the focus area. This university was selected because it is a governmental university. Another reason for the selection was one of the big universities in North Cyprus and the observation that many faculties (12 faculties) had not given much consideration to color as a design element, often using colors other than white for various university functions.

Figure 17: Map of EMU Campus (Retrieved from University Site)

EMU has 12 faculties and more than 141 programs in its departments and subspaces that go with them. The layout of the campus supports a wide range of educational activities and makes sure that each faculty and department has the tools and space they need to provide comprehensive learning and study experiences.

At EMU, the classrooms were organized and labeled by the faculties they housed. The categorization of faculties is as follows: 1. Faculty of Architecture, 2. Faculty of Art & Science, 3. Faculty of Business & Economics, 4. Faculty of Communication & Media Studies, 5. Faculty of Dentistry, 6. Faculty of Education, 7. Faculty of Engineering, 8. Faculty of Health Sciences, 9. Faculty of Law, 10. Faculty of Medicine, 11. Faculty of Pharmacy and 12. Faculty of Tourism. All these faculties use different colors for their sub-spaces (see, Figure 17).

Since the majority of sub-spaces across various departments within a faculty are shared among all departments, it was determined that organizing this table by faculties would

better support the research objectives.

4.1 Limitation of the Case Study

The primary selection area is restricted to the TRNC, Famagusta and existing. Campuses. The EMU was chosen as the case study area among the constructed campus.

The study encompasses all faculties, with analyses focused only on the common spaces between all faculties (see, Figure 18). Non-shared spaces between 12 faculties like lounge areas and wellness areas are not considered. Common spaces include classrooms, auditoriums, laboratories, public restrooms, corridors, register and staff offices, and staircases (See Table 6).

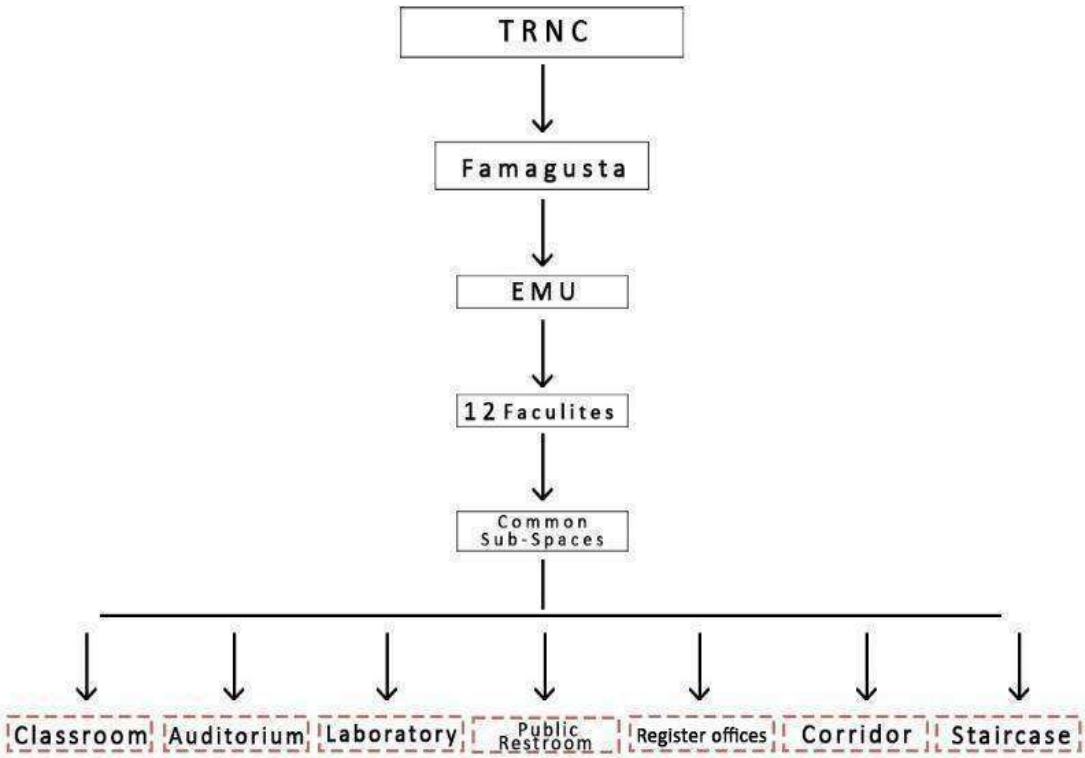


Figure 18: Filtration of Chosen Case Study Space

Table 6: Finding of Common Spaces

Eastern Mediterranean University

Faculties Of EMU	Different Spaces Of Faculties: Class rooms	Flexible Learning Spaces	Lecture Halls & Auditoriums	Studios	Laboratories	Work spaces	Research & Development Spaces	Reading Rooms & Library	Special Collections (Archives)	Public Restrooms (WC)	Lounge Areas	Coffee Shops	Student Organization Offices	Wellness Centers	Register & Staff's Offices	Meeting& Conferences Rooms	IT & Server Rooms	Printing & Photocopying Centers	Corridors	Staircases
Faculty Of Architecture	✓	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	×	✓	✓	×	✓	✓	✓
Faculty Of Art & Sciences	✓	×	✓	×	✓	×	×	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓
Faculty Of Business & Economies	✓	×	✓	×	✓	×	×	✓	✓	✓	✓	×	×	×	✓	✓	×	×	✓	✓
Faculty Of Communication & Media Studies	✓	✓	✓	✓	✓	×	×	✓	✓	✓	✓	✓	×	×	✓	✓	✓	×	✓	✓
Faculty Of Dentistry	✓	×	✓	×	✓	×	×	×	×	✓	×	×	×	×	✓	×	✓	×	✓	✓
Faculty Of Education	✓	×	✓	×	✓	✓	×	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	✓
Faculty Of Engineering	✓	×	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓
Faculty Of Health Sciences	✓	×	✓	×	✓	×	×	×	×	✓	✓	✓	×	×	✓	✓	×	×	✓	✓
Faculty Of Law	✓	×	✓	×	✓	×	✓	✓	✓	✓	×	✓	×	×	✓	×	✓	✓	✓	✓
Faculty Of Medicine	✓	×	✓	×	✓	✓	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Faculty Of Pharmacy	✓	×	✓	×	✓	×	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	×	×	✓	✓
Faculty Of Tourism	✓	×	✓	×	✓	×	×	×	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓

Staircase analyses as the architectural element of a building and selected function between all the faculties were analyzed. The public restroom is also considered a common space for students as a public space in the educational environment. Register and staff offices are not included in this thesis because most did not allow photos and analysis. This thesis does not cover other spaces that are not common between the faculties. 12 faculties were analyzed in the study area. 6 spaces are figured out as the common spaces and analyzed (see, Figure 18).

Within all 6 common spaces, classrooms, auditoriums, laboratories, public restrooms, corridors and staircases, the components of the" identity of space " concept were Analyzed: color, texture, material, sound, smell, dimension, shape, and form (see Table 8).

This study is performed by color mixtures, CMYK colors are used, and under the color mixtures, this used color groups and color schemes and RGB colors are not considered for this study.

4.2 Methodology of the Case Study

The study employed both qualitative and quantitative research approaches. The qualitative methods involved conducting observations, creating inventory tables based on the collected data, capturing photographs and performing analytical evaluations. On the other hand, the quantitative approach focused on calculating the color and identity of space concept distribution charts and interpreting the corresponding graphical representations (refer to Table 7).

Table 7: Stages of a case study

Step 1: Data collection from the Literature review
1. Identifying basic colors and gathering information about color 2. Identifying educational spaces, especially in university spaces and campuses 3. Understanding the concept of space identity
Step 2: Observation
1. Observation of different sub-space of faculties in EMU 2. Creating table in Autocad 2024 software for finiding common space 3. Determine the common spaces between all faculties 4. Phtographing of comon space
Step 3: Preparing the tables for analysis
Observation table of analysis identity of space concept in common spaces
1. Creating table in Autocad 2024 software for every faculties 2. Placing photographs on the table 3. Exploring different concepts of identity of space such as color in shared spaces
Step 4: Preparing the tables for findings
1. Creating table in Autocad 2024 software for Calculating color amount diagrams and other concepts of space identity 2. Interpretation of calculations
Step 5: Suggestions

For the first step, exploring existing literature involves collecting data to have a foundation regarding the research topic. Color basics are part of this discovery. Color research's emphasis on the study is made to explore the impact of color on the users' perceptions. It is also interested in the concepts of educational spaces within the frame of university campuses, focusing on trying to identify those characteristics that define these spaces. Later on, this post deals with the notion of space identity by looking at its theoretical dimensions and how elements such as color found in space contribute to the establishment of an identity in common areas.

The second stage looks to set an observational field in the region to observe space divisions. Mainly, this study will concentrate on studying the observation of the faculties' inner sub-differentiations in EMU. The next stage is when the teams create the tables and diagrams of the shared common space among faculties by using the AutoCAD 2024 software. This step deals with identification by overlapping common spaces and assessing other forms of common spaces in different faculties. Furthermore, the photography of the spaces is used to achieve visually recorded characteristics of space as well as to avail these for later analysis. This step then follows a close analysis of the physical environments of the faculties to close the gap between theory and actual evidence.

Immediately after the third stage, the research organized the observed data in table form for effective analysis. The spatial data was organized by employing AutoCAD 2024 software to create tables according to each faculty. This space observation includes images of the areas to foster better visual communication and representation of the data tables. Herein are various angles by which a concept named space identity is to be understood, such as base the most in use of color for common space will never be left unheard. Thus, the structured presentation of data here prepares the ground for analyses of how color affects spatial identity in common spaces among the different faculties.

The fourth stage essentially proceeds in the form of processing organized data into more meaningful findings. Tables made from AutoCAD 2024 software are then placed into the calculation of the number of concepts the spatial identity element of color plays in common spaces and other concepts on the identity of space. This step allows researchers to differentiate into spatial characteristics. Based on this calculation, some

patterns will appear in those areas under observation from the micro to the macro level of space. Thereafter, such findings will be interpreted by making some sense of them to bring into play how color and other spatial elements determine meaning through shared space. This is the point that bridges the end of that step and the next. Observational data will now be assimilated more or less into meaningful conclusions consonant with the research objectives.

The last stage means recommendations to be pulled from the analysis, incorporating the findings. In this project, it is recommended that one should achieve enhancement of spatial identity of common spaces through effective use of color and other forms of design. The recommendations for enhancing the aesthetics, functionality, and overall experience of shared spaces within universities and campuses among other things will be suggested. This section has culminated with practical solutions in the sense that it obtains theoretical knowledge and observation in the investigation.

4.3 Inventory Tables

An inventory table of different components of space identity has been created for analyzing these components in educational spaces (see Table 8). The inventory table was prepared in AutoCAD 2024 Software. The rows categorize common functional spaces like classrooms, lecture halls, laboratories, public seating areas, corridors and staircases, while the columns focus on different components of space identity.

After analyzing the components of the space's identity, 6 tables were created for each space in the AutoCAD 2024 Software to analyze its status and check the statistical analysis of the spaces (See Table 8).

Table 8: Simple of Inventory Table

Faculties' Names	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room																																				
	Lecture Halls & Auditoriums																																				
	Laboratories																																				
	Public Restrooms																																				
	Corridors																																				
	Staircases																																				

Faculties' Names | Main Findings Of Chapter 3 | Findings Of Common Spaces in EMU Faculties | Photographs | Main Findings Of Chapter 2 | Main Findings Of Chapter 3

The observations were conducted taking into account the overall condition of the space. All elements in the space, such as furniture or walls, were examined.

This research was based on observations and analyses of all the 12 faculties at EMU, aiming to understand the relationship between spatial characteristics and color as operationalized through the respective analyses of such color and identity components inventory tables in each faculty space.

This section focuses on explaining a sample inventory table. The faculty of architecture will explained in the next part as simple (See, Table 9). Detailed analyses for all 12 faculties are provided in the Appendix, labeled as Appendix A-K.

4.3.1 Fill out the analysis Inventory Table

- **Classrooms:**

The classrooms at the Faculty of Architecture were furnished mostly in warm tones, making them feel inviting and comfortable, which is great for studying. To keep everything in harmony and to keep students' eyes from wandering, monochromatic color schemes were used. Whiteboards and digital displays would be easily visible thanks to the matte finishes that minimize glare and the smooth surfaces that make cleaning and maintenance a breeze. The materials mostly consisted of synthetic laminates, which were polished to improve their aesthetic value and durability. The medium ceiling height provided sufficient sound dispersal and ventilation, but the heavy reverberation emphasized the importance of acoustic quality. There was plenty of room for students to sit and move around in the classrooms because of their generous dimensions. The selection of low-odor materials helped to keep the space's mild olfactory ambiance, which contributed to its peaceful and concentrated vibe. The classroom was designed to facilitate a regulated learning environment with

symmetrical layouts and a mostly regular shape. The form was simple, intentionally dealing horizontally with minor changes, focusing on harmonizing the form with the function.

- **Auditoriums and Lecture Halls:**

Using wooden tones on all surfaces made auditoriums and lecture halls feel warm. This helps direct the eyes of the audience to the focal point and retains formality and cohesion when using monochrome colors. The tasks of different surfaces differed. For instance, the material used to cover the stage was made of a smooth and non-slippery surface for avoidance of accidents, and this material reflected the light in its smooth and shiny finish. Tests on structural strength and aesthetic attraction likely used natural materials and synthetic composites, including fabric. Therefore, the stage and the lectern are essentially high-gloss, polished surfaces, highlighting their meticulous attention to detail and exceptional craftsmanship. The acoustic design's thoughtful compromise between soundproof panels and minimal reverberation ensures smooth lectures and presentations. Low-odor materials maintained a professional and distraction-free environment, resulting in a delicate and neutral fragrance. The lecture halls were large and lengthy, so there was plenty of room for people to sit and move around while still being able to see clearly from any angle. To make a room feel more open and spacious, medium-high ceilings were usually used. The lecture halls' regular and symmetrical shapes allowed for an ordered seating arrangement and a balanced visual flow. Stage backdrops and projection screens were vertical components that drew attention to the presenter or presentation location; however, the form also had horizontal orientations. The design fostered a formal yet comfortable learning atmosphere while prioritizing simplicity and functionality; therefore, little alterations were noted.

- **Laboratories:**

Strong colors were the basis of the desaturated color group, the colorful laboratories had made a very comfortable and lively place among the faculty architecture for concentrated work. With a monochromatic color scheme, visual harmony was guaranteed and distractions were minimized. The furniture and counters were made with smooth textures for simple cleaning and upkeep, and the surfaces were matte-finished to reduce glare, creating a comfortable work environment even under harsh laboratory lighting. To guarantee longevity and chemical resistance, the materials mostly consisted of synthetic, long-lasting surfaces for equipment and counters.

These, together with polished finishes on several fixtures, gave the room a more contemporary and professional vibe.

The laboratory was mentioned as the very place for an acoustic trip up because of the loud noise generated during all these works and equipment concerning which construction or activity increase can disturb attentiveness even more. The presence of inadequate soundproofing or sound-absorbing materials has made this a highly unregulated acoustic background with extremely high noise levels in its presence. Good ventilation systems and the use of low and nearly odorless materials were used to keep things sterile and clean, which made the environment both rather delicate and neutral, with an olfactory background.

The cell layout, a design providing order in a workflow, was provided by the regular symmetrical shapes of the laboratories. The large rooms of the labs kept room for the users to freely access air. Ceiling heights were of moderate height when a balance between roominess and good lighting was a choice. Few visible changes could separate

the labs from what is mostly a flat and highly functional arrangement. Clean lines stressing functionality provided an easily working office environment, while its simplicity debunks that private goal.

- **Restrooms (WC):**

Public restrooms in commercial buildings or along busy highways often showcase elegant and contemporary designs. These spaces typically emphasize aesthetics through the use of clean, cool colors and a monochromatic palette that promotes simplicity and minimalism. To enhance the overall look and reduce glare, rounded and polished fixtures are commonly installed. Ceramic tiles are preferred for their water resistance and durability in wet conditions. Additionally, all fittings and tiles are designed with a polished finish to maintain a modern and clean appearance.

The lavatories had poorly installed insulation and soundproofing, which is why the outside noise and noise from nearby rooms could be heard quite loudly easily. It has been a very frustrating environment and less than conducive to privacy. There were also very dreadful odors coming from the restroom that smelled like really bad gases, and it was probably due to the absence of any proper ventilation or ineffective deodorizer.

The room had orderly layouts but it had uneven distribution of fixtures or designed items in the washroom which make it look asymmetrical. Although it was clearly thought out and structured into an overall pattern, some parts were intentionally shifted about or altered to accommodate different activities or aesthetic needs. While visually interesting, the asymmetry did disturb the equilibrium of the area from time to time. The lavatory was trimmed just fine—neither too big nor too little. In it, could adjust interruptions by an average ceiling height. It becomes cozy and harmonious inside.

The lavatory appears very neat and modern, rendering utilization the greatest importance to the horizontal layout.

- **Corridors and Staircases:**

The faculty was characterized by subdued and neat decor, ranging from cool-toned corridors and staircases both externally and internally in continuity. Hence, this delineation was implicit in the balance of the spaces. Walls and railings with surfaces soft and smooth made cleaning so much easier, and matte finishes reduced shine, providing pleasing aesthetics. All handrails and steps were super-polished to make them sturdy and beautiful, and the materials were bobbed and woven between synthetic and natural materials.

Sound-absorbing materials were used to create a contemplative acoustic ambiance that made the circulation area more pleasant in terms of volume. The air was fresh enough that it moved around freely and did not smell.

The symmetrically proportioned and rectilinear halls and stairways are crucial in the systematically organized arrangement that makes the place orientation and navigation of users easier. The spacious stucco staircases provided built environments that stand safe and comfortable for their use thanks to their regular, well-shaped steps. To use up space to the maximum extent, with as much movement as possible, the corridors were long and very narrow. A medium ceiling height was settled on to hit a balance between habits and space. The spaces during formerly clean lines efficiently produced in movement, exemplified horizontal and vertical orientations, not shattering any architectural aesthetic. They allowed seamless and made movement possible by designing the parts in an appealing and rational layout to act as circulation amongst areas of high quality.

Table 9: Inventory Tableof Architecture Faculty

Faculty of Architecture	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room	 																																				
	Lecture Halls & Auditoriums	 																																				
	Laboratories	 																																				
	Public Restrooms	 																																				
	Corridors	 																																				
	Staircases	 																																				

4.4 Findings of the Case Study

The findings derived from the case study are consolidated and summarized in Table 10. This table calculates the relationship between color choices and the components of spatial identity within the interior design of the common spaces in the faculties. The findings presented in Table in Appendix L reveal distinct preferences for spatial identity components across various interior spaces within EMU faculties.

All the findings of the case study are outlined below:

4.4.1 Classroom

Regarding color as an identity component for the interior space, warm and monochromatic color schemes were predominantly utilized in classrooms, reflecting a consistent design approach. Lecture halls demonstrated a balanced use of both warm and cool color groups, maintaining a monochromatic scheme throughout. Laboratories, on the other hand, predominantly employed cool colors with a uniform adherence to monochromatic schemes. Similarly, restrooms in most faculties featured cool colors within a monochromatic framework. Corridors exhibited more variation, with one faculty using cool colors exclusively, another combining warm and cool tones, and most adopting a monochromatic scheme. Notably, one corridor featured a complementary color scheme that incorporated both warm and cool colors. Staircases predominantly displayed cool colors, consistently following a monochromatic design.

Regarding texture as another element of spatial identity, it was observed that all faculties used smooth textures for interior spaces. The reflective quality of the texture used for most faculties was matte. Only one faculty used glossy textures and another faculty used both glossy and matte textures for classroom spaces.

About materials as another component of the identity of the space, it was observed that all faculties used synthetic materials, and also regarding the finish of materials, all faculties used polished materials for classroom spaces.

Sound is one of the elements of the identity of space. The situation of sound in classrooms in all faculties was as follows: 8 faculties have high reverberation and 4 of them have low, so most of the classrooms have high reverberation. Regarding the acoustic ambiance of the classroom, it was observed that all the faculties have quiet situations.

The evaluation of the smell as an element of spatial identity across 12 faculties, revealed that classroom spaces predominantly feature a subtle olfactory ambiance and a calming atmosphere, avoiding strong or energizing scents.

Perception of the dimension of space is another key element of identity. Five classrooms preferred wide dimensions for their space which is the highest number. After that, three Faculty have a long dimension for their classrooms. Only 1 faculty has short and another one has long-wide dimension perception for classrooms. Two faculties are in a state of long-narrow dimensions of space. About height as an element of dimension, it was observed that all classrooms are of medium height.

The first aspect of shape, as an element of spatial identity, was found to be regular across all classrooms. In terms of symmetry, all classrooms exhibited a symmetrical layout. Additionally, the shapes of the classrooms were consistently observed to be simple, reflecting a straightforward design.

All classrooms were characterized by regular 3D geometry, emphasizing uniformity and simplicity in spatial design. Additions were a key element in the design; no subtractions were observed in the spatial design. The orientation of all classrooms was horizontal.

4.4.2 Lecture Halls and Auditorium

Lecture halls utilized a balanced approach to color schemes, incorporating both warm and cool color groups. The color schemes were predominantly monochromatic, except for one case that was analog and another that had a complementary color scheme.

Smooth textures were consistently applied to lecture halls across all faculties. The reflective quality of these textures was mostly matte, except for one faculty that used both glossy and matte.

The materials used in lecture halls were synthetic, adhering all the faculties used a polished finish.

In terms of sound, lecture halls displayed a mix of acoustic properties. Equally, six of them have high reverberation and 6 have low reverberation. Most of them have quiet.

The olfactory ambiance in lecture halls was characterized by subtle and calming scents. There were no strong or overpowering smells.

The dimensions of lecture halls varied. Most lecture halls leaned towards long-wide spaces, promoting a sense of openness and accommodating larger groups. Medium-height ceilings were the standard across all faculties.

The shape of all lecture halls was observed to be regular and symmetrical. The simplicity of the shapes used ensures functionality without unnecessary complexity.

All lecture halls featured regular 3D geometry, with no evidence of subtractions in their spatial design. Their orientation was consistently horizontal.

4.4.3 Laboratories

Laboratory spaces predominantly utilized cool colors, emphasizing a consistent adherence to monochromatic color schemes.

All laboratory spaces featured smooth textures, enhancing the perception of cleanliness and orderliness. Regarding the reflective quality of the textures, matte surfaces were consistently utilized, minimizing glare.

Synthetic materials were predominantly employed in laboratory spaces. Additionally, the finish of the materials used in these spaces was polished, contributing to a clean and refined appearance.

Regarding sound, the laboratory spaces were characterized by high reverberation in most faculties. The acoustic ambiance was observed to be noisy.

The olfactory ambiance in all laboratories was subtle and calming, aligning with the functional requirements of these spaces.

Laboratory spaces exhibited a range of spatial dimensions. Wide, long, and long-wide dimensions were emphasized in all faculties equally. Ceilings of moderate height were a common feature throughout all faculties.

The shape of laboratory spaces was consistently regular and symmetrical, contributing to an orderly and efficient layout. The simplicity of the shapes further supported the functional purpose of these spaces.

The majority of laboratories showcased regular 3D geometry, with no indications of subtractive elements in their design, and maintained a consistently horizontal orientation.

4.4.4 Restroom (WC)

The color group prominently features cold color with an emphasis on a monochromatic color scheme for most public restrooms.

Smooth textures dominate the surfaces. The reflective qualities are matte, minimizing glare. Synthetic materials are predominantly utilized, with polished finishes enhancing the cleanliness of these spaces.

In terms of sound, public restrooms exhibit high levels of reverberation, while maintaining a quiet acoustic ambiance that ensures privacy and comfort for users.

The olfactory ambiance is subtle and the smell atmosphere of all the faculties is calm.

Dimensionally, public restrooms are effectively utilized in order narrow, long, and long-wide proportions complemented by moderate ceiling heights that strike a balance between openness and enclosure.

Most WCs have regular and symmetrical spatial configurations. The shapes' simplicity aligns with these spaces' straightforward and functional nature.

Furthermore, the 3D geometry remains consistently regular, with no complex or subtractive elements, and a horizontal orientation.

4.4.5 Corridor

Regarding color, 10 findings were associated with the cold color group, and the color scheme findings were consistent across categories, while the complementary scheme had only 1 finding.

In terms of texture, smooth surfaces were dominant, with 12 instances, and the reflective quality was noted as matte in 9 findings.

In the material category, synthetic materials were identified in 11 instances, and polished finishes were noted in 12 findings.

For sound, high reverberation was recorded in 9 findings, and the acoustic environment in corridor spaces was quiet in 11 spaces.

In terms of smell, the olfactory ambiance was subtle and calming, recorded in 12 findings.

The dimensions of corridor spaces varied, with long widths observed in 3 instances, long-narrow lengths in 7 findings, and moderate medium heights in 12 instances.

The type of corridor spaces in 9 faculties was regular and the shape of the corridor spaces was symmetrical in 9 findings, while simplicity was observed in 12 instances.

Regarding 3D geometry, regularity was a feature, recorded in 9 findings. Lastly, in

terms of form, the horizontal orientation of corridor spaces was consistent, with 9 findings and all the spaces had additions transformation.

4.4.6 Staircase

In terms of color, 3 findings were associated with the warm color group, while the color scheme showed consistency with 11 instances for monochromatic schemes and 1 for analogous schemes.

When it comes to texture, smooth surfaces dominated with 12 instances, and the reflective quality was matte in 9 findings.

For materials, synthetic materials appeared in 3 findings, while 5 findings incorporated both types of materials, and polished finishes were recorded in all 12 instances.

In the sound category, both high and reverberation qualities were noted equally in 6 instances, while the acoustic ambiance was consistently quiet, recorded in 12 findings.

Regarding smell, the olfactory ambiance was subtle in 12 instances, and calming. Atmosphere was also noted in all 12 spaces.

The dimensions of staircase spaces showed variability, with wide widths observed in 1 instance, narrow lengths in 7 findings, and moderate heights recorded in all 12 instances.

The shape of staircase spaces was symmetrical in 4 findings, while simplicity was observed in 12 findings, and all staircase spaces were noted to have regular shapes.

For 3D geometry, regularity was a dominant feature with 10 findings. Regarding form, the vertical orientation of staircase spaces was consistent across all 12 findings, with all spaces also featuring additive transformations.

Table 10: Findings of Case Study Table

		Identity												Identity																Identity												
	Common Functions	Color							Texture					Material			Sound				Smell		Dimension										Shape				Form					
		Color Group			Color Scheme				Surface Quality		Reflective Quality			Type			Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion							Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
		Warm	Cold	Both	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Both	Natural	Synthetic	Both	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Long-Narrow	Long-Wide	Short-Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
12 Faculties	Class Room	6	4	2	9	1	2	0	12	0	10	1	1	0	12	0	8	4	12	0	0	12	3	1	5	0	2	1	0	0	12	0	12	0	12	0	12	0	12	0	12	0
	Lecture Halls & Auditoriums	5	5	2	9	1	2	0	12	0	11	0	1	0	10	2	6	6	11	1	0	12	1	0	4	0	0	7	0	0	12	0	9	3	12	0	10	2	12	0	12	0
	Laboratories	5	7	0	12	0	0	0	12	0	10	1	1	0	10	2	11	1	0	12	0	12	4	0	4	0	0	4	0	0	12	0	10	2	11	1	10	2	12	0	12	0
	Public Restrooms	2	8	2	10	0	2	0	12	0	11	1	0	0	11	1	9	3	9	3	1	11	2	1	1	5	2	1	0	0	12	0	9	3	7	5	9	3	12	0	12	0
	Corridors	1	10	1	11	0	1	0	12	0	9	2	1	0	11	1	9	3	11	1	0	12	3	0	0	1	7	0	1	0	12	0	10	1	9	3	10	2	12	0	10	2
	Staircases	3	9	0	11	1	0	0	12	0	9	1	2	4	3	5	6	6	12	0	0	12	0	0	1	7	1	1	0	0	12	0	12	0	4	8	10	2	12	0	0	12

4.5 Suggestions for the Case Study

The case study carried out at Eastern Mediterranean University (EMU) shows that the choice of colors for educational environments should be a planned and scientifically based procedure. The results of EMU show that the use of color is not just an aesthetic one but also a fundamental determinant of spatial identification, enhancement of cognitive involvement, and user experience influence. Educational environments with well-chosen color schemes created by interior architects show noticeably higher spatial coherence, identity development, and user satisfaction at EMU than those where color decisions were made haphazardly by building crews. This difference emphasizes the need of include designers and teachers in the decision-making process to guarantee that colors are selected depending on their psychological and functional influence rather than management convenience (Mahnke, 1996).

The case study at EMU strengthens even more the part color plays in spatial difference and identity building. Research done on campus found that different warm and cold tones in hallways enhanced wayfinding and navigation clarity. Students showed more involvement and energy in classrooms where warm colors—such as tones of yellow and orange—were utilized, consistent with past studies showing that warm colors fit young and active learning environments (Engelbrecht, 2003). On the other hand, cooler tones—blue and green, for example—painted in laboratories and research areas helped to create a quiet and focused environment, therefore supporting the idea that color psychology can be used to maximize learning opportunities (Gaines & Curry, 2011).

The investigation also indicated, nevertheless, that several of EMU's educational facilities suffered from incoherent color choices—that is, colors chosen depending more on construction convenience than on a disciplined design approach. Under these circumstances, inappropriate color use produced visual clutter, poor spatial identification, and worse user satisfaction. According to the study, color schemes were created with interior architects' experience in six of the twelve faculties under examination, resulting in a more harmonic and useful interior. In the other faculties, on the other hand, furniture vendors and construction teams mostly controlled color choices, which resulted in inconsistent aesthetics and a lack of cohesiveness. This result validates Mahnke's (1996) criticism that color decisions in educational settings neglect to improve spatial cognition and user experience without scientific direction.

Moreover, the case study of EMU shows how psychological aspects of color affect learning results. While study areas and reading rooms with colder tones gave a sense of peace, helping pupils to concentrate better, classrooms and general learning areas where warm colors were mixed generated more lively and participatory atmospheres. This is consistent with Engelbrecht's (2003) claim that in many learning situations, color can be deliberately used to boost cognitive abilities and increase attentiveness. The research at EMU also showed how color affects spatial dimension perception. In high-ceiling areas, for instance, dark colors provided an illusion of lower height, which made places feel more personal; lighter colors in small passageways helped to generate a sense of expansion and openness. These results support the spatial manipulation hypotheses put out by Franklin & Brooker (2016), who contend that color can change how one views depth and scale in learning environments.

The absence of institutional color identity in several parts of the EMU campus was a major problem noted in the case study. While some faculties used colors strategically and coherently to support the university's identity, others lacked a disciplined approach, which resulted in discrepancies in the campus environment generally. Like many other universities, EMU might gain from implementing a consistent color plan reflecting its academic brand and institutional ethos, according to the study results. Daggett et al. (2008) provide evidence for the value of institutional color identity since they contend that coherent color schemes not only improve the visual attractiveness of an institution but also inspire pride and belonging among staff members and students.

EMU also showed the value of multi-sensory design integration—that is, the way color was balanced by other sensory components to produce a coherent classroom environment. At EMU, classrooms with soft, neutral colors mixed with acoustic enhancements improved focus and lessened distractions. Furthermore, in line with Pallasmaa's (2012) and Henshaw's (2014) ideas on sensory integration in design, minor olfactory upgrades in some spaces, such as libraries and study halls, helped to create an overall sense of comfort and attention. These results show that although color is a great tool for influencing learning environments, its influence is enhanced when paired with other sensory components as music and lighting.

At last, the case study emphasizes the need for deliberate color applications for spatial manipulation, wayfinding, and camouflage. Contrasting colors were applied in corridors and circulation spaces at EMU to enhance signpost efficacy and navigation clarity. In some areas, the deliberate mixing of colors produced a camouflage effect whereby components like storage cabinets and partitions fit the whole design and hence minimize visible clutter. Moreover, the study noted cases in which color was

employed to alter impressions of space, including light-reflective color schemes making little rooms seem more open. These results complement the ideas of Franklin & Brooker (2016), who stress that spatial legibility can be improved and human view of space changed with color.

Finally, the case study at EMU offers significant empirical data proving that color is a basic instrument in determining the surroundings of classrooms. Strategically, color improves cognitive engagement, emotional well-being, and spatial identification. The study also shows, though, that color decisions may become arbitrary and useless without organized approaches and stakeholder participation. EMU and other educational institutions should thus apply evidence-based color methods that include psychological concepts, user feedback, and cultural background into the design process. Future studies should also look at how color perception in educational environments is influenced by outside elements as fashion trends, climate, and user demographics. Using the results of EMU's case study, designers and architects may create learning spaces that are not only aesthetically pleasing but also psychologically and functionally ideal for student achievement.

Chapter 5

CONCLUSION

Beyond simple aesthetics, color plays a vital role in educational environments affecting cognitive ability, emotional well-being, spatial awareness and general learning efficiency. Particularly in university environments, this study has methodically investigated how color is integrated into educational environments and investigated how a structured approach to color application might improve user experience, spatial efficiency, and the general quality of learning environments. Under direction by the central research question—"Can a methodological approach be developed for using color to improve the quality and spatial perception of different educational environments?"—this study has found that color is essential in determining students' experiences and involvement in educational institutions.

This study has produced several important results using a comprehensive examination of the body of current literature, empirical observations and case study analysis of Eastern Mediterranean University (EMU). First of all, color greatly affects spatial cognition and identification by boosting wayfinding, spatial organization and mobility across challenging surroundings. Effective use of color helps teachers and students negotiate classroom environments more naturally, therefore lowering uncertainty and improving efficiency. Second, colors affect cognitive involvement and emotional reactions by different psychological and physiological means. Though overused might be overbearing, warm colors—red, orange and yellow—are connected to energy,

stimulation and creativity. On the other hand, cold colors—blue and green, for example—foster rest, concentration and mental clarity, which is why they are perfect for study desks and classrooms. Strategically mixed neutral tones help to balance things and stop visual tiredness.

The study underlines even more how effective color can be in developing institutional identity. Specific color palettes allow universities to designate various departments, faculties and common areas, therefore strengthening their institutional identity and increasing the uniqueness of learning environments. Furthermore, the studies verify that academic success and learning efficiency directly depend on color preferences. Balanced, deliberate color schemes in spaces help to improve student motivation, memory retention and stress levels, thereby enhancing the whole learning environment. EMU's case study confirmed these results by exposing opportunities for development in color applications across lecture halls, labs, hallways and communal areas as well as successful practices.

By suggesting an evidence-based framework for color use in educational environments, this work advances architectural design, educational psychology and environmental planning. This work makes one of the main contributions to bridging the theoretical knowledge gap with actual application. Although earlier studies mostly concentrated on the psychological effects of color, this study combines architectural, cognitive and educational viewpoints to offer a disciplined, useful approach to properly using color in educational environments. Moreover, by using an interdisciplinary approach, this study offers a complete viewpoint that can guide teachers, designers, and builders in their attempts to establish cognitively supporting, functional and interesting learning environments.

The results of this study have great ramifications for educational policy as well as architectural practice. By matching color schemes to various educational purposes, architects and interior designers can apply these ideas to create learning environments that enhance student involvement and well-being. While creative and collaborative environments can profit from stimulating colors like warm yellows and oranges to inspire engagement and invention, classrooms and lecture halls should include calming colors like light blues and greens to enhance concentration. Furthermore, color-coded navigation systems can be used across campuses to enable guests and students to more quickly negotiate areas. These results imply for educational institutions that strategic color use and consistent branding can strengthen institutional identity, increase spatial awareness and generate an environment that supports both academic performance and emotional comfort.

Although this study provides important new perspectives, some constraints should be recognized. First, variations in color perception depending on culture and geography could affect the relevance of these results in several environments. Future studies could investigate comparative studies across many colleges and cultural environments to validate and improve these conclusions since this study concentrated mostly on a specific case study (EMU). Second, while color perception depends on lighting, this study did not analyze closely how natural and artificial lighting conditions combine to influence spatial cognition and emotional reactions. Future research should look at how lighting design and color affect classrooms. Finally, this study is based on transient observations; a longitudinal study would offer a more thorough understanding of how color affects student involvement, academic performance, and well-being throughout time.

Building on these constraints, several directions for the next investigation surface. Future research could investigate the long-term psychological and cognitive consequences of color in educational environments, assessing if constant exposure to particular color schemes results in continuous enhancements in learning outcomes and student well-being. Examining how color perceptions vary across various cultural and educational settings as well as how students from many backgrounds react differently to color stimuli would be another worthwhile study direction. Furthermore, the way smart technology might be used in color applications offers a fascinating field of research. Real-world educational settings could be used to test adaptive color-changing technologies such as interactive wall projections and dynamic LED lighting to evaluate their effects on student focus, relaxation, and cognitive involvement.

In the end, this study emphasizes how much color shapes educational spaces. Far beyond decoration, color is a strong design tool that can greatly affect spatial interaction, emotional well-being, and learning efficacy. This work offers a methodical way to improve spatial cognition and learning efficiency using color application by combining scientific ideas, empirical data, and design approaches. Architects, designers, and teachers have to use evidence-based methods to maximize learning surroundings as educational institutions change.

The results of this study emphasize how careful color choice in educational environments should be taken, not depending just on aesthetic preferences or arbitrary judgment. Rather, design experience and scientific knowledge should direct color choices to maximize their advantages for professors and students. Including careful color schemes in educational design can help to guarantee that learning environments stay inspiring, functional, and fit for intellectual development going ahead. This study

lays a basis for the next developments in educational architecture and interior design by realizing the transforming potential of color, helping to create more efficient, interesting, and inclusive learning environments for the next generations.

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APPENDICES

Appendix A: Filling out the analysis Inventory Table of the Faculty of Art & Science

- **Classrooms:**

Functional and comfortable design characterized Faculty of Art & Science classrooms. Cold tones generated a calm, concentrated learning environment. Monochromatic color schemes reduced visual distractions. Surface smoothness and mattress decreased lighting glare and created a clean, maintainable atmosphere. The materials were mostly synthetic finishes, polished for longevity and aesthetics. High reverberation and medium ceiling heights helped preserve acoustic balance and improve sound dispersal and ventilation. The long, narrow accommodated more people without cramping them. It was peaceful because low-odor materials added a gentle scent. Horizontal transformation with regular and symmetrical geometry was used. Minimal additions created a simple, uncluttered space that fit the goal of instruction.

- **Auditoriums and Lecture Halls:**

Faculty lecture halls and auditoriums have warm and chilly tones, creating a professional atmosphere. Emphasizing the stage and lectern with complementary colors created unity. Smooth and matte surfaces were easy to clean and durable, creating a modern look. Combining natural and synthetic materials like wood and fabric offered structural stability, aesthetic value, and refined finishes. Medium ceilings improved lecture hall sound dispersion and clarity. Clear communication via high reverberation allowed lecturers to reach big audiences. Low-odor materials in lecture halls created a relaxing scent. The atmosphere was balanced between peaceful and stimulating, encouraging focus and engagement. The halls were wide enough to accommodate many students while offering clear views of the lecturer and presentation area. Lecture rooms have a uniform, symmetrical geometry, and simple,

striking horizontal forms. Tiered seating was added to improve vision and interaction while maintaining a harmonic and balanced spatial transformation. These careful design choices made lecture halls functional and inspiring.

- **Laboratories:**

Faculty of Art & Science lab is functional and adaptable for scientific experimentation. The monochrome color scheme and cool tones create a professional, focused workplace that emphasizes precision. Smooth, matte surfaces are easy to clean and maintain, improving hygiene and reliability. Commonly used are polished synthetic materials for durability and beauty that resist deterioration from continuous use. Equipment says the lab has a noisy, reverberant atmosphere. Low-odor products create a relaxing setting for focused work. Space is maximized with wide layouts to accommodate more users without overcrowding. Medium ceiling heights improved sound dispersal and ventilation; maintained acoustics. Simple, practical objects with symmetrical and consistent geometry dominate the area. To facilitate user-equipment interaction, horizontal spatial transformations organize flow. These designs provide practical, comfortable, and scientifically innovative labs.

- **Restrooms:**

This faculty's public restrooms promote hygiene, and functionality, for user satisfaction. A clean, refreshing ambiance is created by cool tones. Monochromatic color schemes simplify and give order. Smooth and matte surfaces are practical for frequent usage since they are easy to clean and maintain. Polished synthetic materials have durability and aesthetic appeal while withstanding considerable traffic. Toilets have strong reverberation, balancing privacy and openness. Reduced odors improve user comfort. Carefully planned narrow-long and practical areas promote efficiency and seclusion. Its regular and uneven shape creates a disorganized but harmonious

space. Horizontal spaces improve accessibility, while minimal design helps keep the setting simple. Due to these deliberate design choices, public restrooms are clean, functional, and user-friendly.

- **Corridor:**

To describe the corridor, warm and cool colors were chosen. Wooden door frames and trimmings are warm, creating a natural atmosphere. In contrast, chilly colors like blue chairs calm and balance the environment. The complementary color palette was chosen since it enhances the visual appeal and balances warm and cool tones. This keeps the corridor functioning and attractive. The corridors' polished flooring and walls are smooth. Smoothness makes maintenance easier and gives a clean, professional image. Matte reflective material reduces glare and improves user comfort. Corridors employ natural and manufactured materials. The seats add synthetic features, while the terrazzo flooring is polished, robust, and useful. By combining utilitarian and attractive materials, the corridors are resilient and inviting. Since corridors are transitory locations where people talk and move, they are relatively noisy. Polished floors and walls may cause considerable sound reverberation, but the furnishings absorb part of it. The corridors' gentle, relaxing scent reflects a clean, neutral atmosphere. Synthetic chairs and polished surfaces are odorless, creating a clean, pleasant environment. The long, thin hallways are ideal for movement. The medium-high ceilings provide an intimate, utilitarian room that emphasizes practical use while providing appropriate ventilation and lighting. The regular and asymmetrical passageways create an orderly and attractive setting. Their minimalism fits these spaces' practicality, while chairs along the walls offer functionality. The consistent 3D geometry and horizontal form transition reinforce space direction and movement.

- **Staircase:**

Cool tones blend into the building's design. The staircase has white-painted walls, gray terrazzo steps, and subdued wooden railings. Matte finishes and smooth surfaces reduce glare and simplify upkeep for a clean, streamlined look. Terrazzo and wood deliver durability and authenticity, while polished finishes add elegance and functionality. An enclosed stairway reduces sound reverberation, creating a peaceful, professional atmosphere. Soft olfactory elements and a simple design boost user comfort. Its long, narrow shape optimizes mobility and medium height balances. The construction has straight lines and a utilitarian layout, but landings and railings offer visual appeal. Safety and aesthetics are improved by wooden railings without losing staircase simplicity or efficiency. Vertical arrangement makes floor connections neat and efficient.

Appendix A: Inventory Table of Art & Science Faculty

Faculty of Art & Science	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room			■	■				■		■			■	■		■			■	■			■		■		■		■		■		■		■	
	Lecture Halls & Auditoriums		■	■			■		■		■		■	■	■		■			■			■			■	■	■		■		■		■		■	
	Laboratories			■	■				■		■			■	■			■		■			■			■	■	■		■		■		■		■	
	Public Restrooms			■	■				■		■			■	■			■		■			■			■	■	■		■		■		■		■	
	Corridors		■	■			■		■		■		■	■	■		■			■			■			■	■	■		■		■		■		■	
	Staircases		■	■	■				■		■		■	■	■		■			■			■			■	■	■		■		■		■		■	■

Appendix B: Filling out the analysis Inventory Table of the Faculty of Business & Economies

- **Classrooms:**

The classes in the Faculty of Business and Economics were designed to be comfortable and useful. A peaceful place to learn is one with warm tones and similar color schemes. Matte and smooth surfaces cut down on glare and make things look more professional. Synthetic materials with smooth finishes make the room last longer and look better. The classrooms have a lot of echoes, but they are quiet enough for focused learning. Using mild aromatic ingredients to create a relaxing atmosphere helps people pay attention and feel at ease. Long and narrow classrooms make it look like there is a lot of space for all the kids. Medium ceiling heights make rooms sound better and look better. Simple geometrical ideas help make surroundings clearer and more organized by making them regular and symmetrical. Regular 3D geometry with changes and horizontal orientation is used for the structure. These features make the setting unified and useful, which helps with learning and working together.

- **Auditoriums and Lecture Halls:**

The Faculty of Business & Economics' lecture halls and auditoriums are constructed for comfort and professionalism. Warm tones and a monochrome color scheme create a calm, focused setting. Matte finishes and smooth textures eliminate lighting glare, creating a clean, modern look. The space's utilitarian needs are met by synthetic materials with polished finishes that are durable and attractive. The acoustic design mixes heavy reverberation with calm to help huge audiences communicate. The relaxing atmosphere is enhanced by subtle fragrance ingredients that promote focus and involvement. The proportionally wide layout provides good sightlines to the lecturer and presentation area, while the medium ceiling height disperses sound and

ventilates. The lecture halls' uneven but symmetrical shapes blend practicality and aesthetics. Simplified design stresses order. The interiors use irregular 3D geometry with horizontal orientations and clever touches like tiered seating. These characteristics improve visibility and engagement while transforming space harmoniously. These design components create inspiring and efficient learning and engagement spaces.

- **Laboratories:**

Faculty of Business & Economics labs are practical and adaptive for scientific work while preserving a professional and quiet environment. The uniform color pattern and warm tones provide a focused and organized workspace. The laboratory's modern, hygienic design is enhanced with smooth surface textures and matte finishes that decrease glare and make cleaning easier. Due to their durability and sleek appearance, polished synthetic materials may withstand regular use. Laboratory acoustics are noisy and reverberant, reflecting the dynamic activity inside. Though mild, the aromatic ingredients provide a relaxing atmosphere that supports concentrated work and comfort. Wide spaces with medium ceiling heights allow for equipment and staff while distributing sound and airflow. The laboratory spaces are simple and clear with irregular shapes and symmetrical layouts. Their straightforward shape aids workflow and accessibility. An organized yet changeable environment for scientific research is created via irregular 3D geometry, horizontal orientation, and extra modifications like workstations and storage. Our planned design components provide practical, efficient, and supportive labs for rigorous and concentrated activities.

- **Restrooms:**

Hygienic lavatories conducive to bodily cleanliness, pleasant comfort, and assuring user delight are the objective of the design criteria for the Faculty of Business &

Economics. The cold colors and monochromatic hue give a utilitarian, cleaned atmosphere. Smooth surface textures and matte finish make the cleaning process much easier, yet also maintain professional appearance. Constructed form polished synthetic materials, and these can withstand the harshest use even when they look the greatest. A large resonance area is built in solitude and openness. Quietness is helping the mind to calm down. Delicate fragrances lend an enjoyable, sanitary atmosphere. The narrow restroom works optimally for movement and solitude. - The lower ceiling provides a more balanced, open room. The basic, regular, asymmetrical shapes make for a practical restroom. Function-enhancing mirrors and partitions are simply added to ordinary 3D geometry instead of being arranged along a smooth horizontal plane. Such iconic forms design the restrooms to be clean, efficient, friendly to the user, and to satisfy the need for 'real frequent use in a neat and friendly environment.

- **Corridor:**

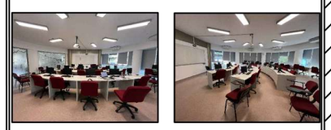
The hallways of the Faculty of Business & Economics are cool, serene, and efficient. The room is also very organized and not at all crammed full of devices or pieces of furniture. A somewhat cool and monochromatic color palette reinforces a feeling of order rather than confusion. Flat matte finished surface and reduced glare to make it easier to maintain a professional style. Shiny, for example, laminate, plastic, and vinyl, is a favorite synthetic product used in highly trafficked areas in a building. High acoustic reverberation and quietness inside corridors terminate collectively to gift residents of a soothing atmosphere in which they move and concentrate. Scents of freshness originally described one way in creating a sense of neat and friendly spaces. Distances they are of appropriate length and thin in width optimize movement without overcrowding. A medium-high ceiling creates both intimacy and openness and makes airflow and lighting appropriate. Symmetrical and functional realization with a

minimalist design, little else memorabilia aside from a recurring 3D geometry, oriented horizontal, signage and seating. These design aspects are purposeful insofar as they make the spaces efficient and attractive while simultaneously meeting the needs of those students and staff who will use them every day.

- **Staircase:**

The Faculty of Business & Economics staircases prioritize functionality, safety, and comfort. They reflect serenity, positivity, and coolness with cold tones and analogous colors. Dull matte textures and smooth, finished bright surfaces hide fine cracks that might be there and ease maintenance to create a sleek, clean look. Man-made and natural materials polished for durability and elegance make the stairs robust and attractive. Even with a high reverberation, users can work in peace and professionalism because of the acoustic design. When the user also feels safe, the soft aroma will make the user more comfortable. To achieve vertical connections, it uses height optimization for the climbing, whereby the staircase is wrapped with a narrow base plus a tad bit more wide profile. Its common design has some asymmetrical accents that create visual appeal and are not intricate. Its regular 3D design with an overall vertical orientation and intelligent add-ons like wood rails help enhance security without presenting an eyesore. One would spend almost an entire day appreciating practical and physically pleasing staircases before becoming efficient at shuffling hundreds of people off to various places within building when you see one.

Apendix B: Inventory Table of Business & Economies Faculty

Faculty of Business & Economies	Common Functions	Photos	Identity: Color						Identity: Texture				Identity: Material		Identity: Sound				Identity: Smell		Identity: Dimension							Identity: Shape				Identity: Form					
			Color Group		Color Scheme				Surface Quality		Reflective Quality		Type		Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion				Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
			Warm	Cold	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Natural	Synthetic	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
	Class Room																																			
	Lecture Halls & Auditoriums																																			
	Laboratories																																			
	Public Restrooms																																			
	Corridors																																			
	Staircases																																			

Appendix C: Filling out the analysis Inventory Table of the Faculty of Communication & Media Studies

- **Classrooms:**

Functional, and laid-back, the classroom of the faculty of Media and Communication stresses learning. The use of a warm color group with a monochromatic scheme of red, beige, and off-white - in terms of mood, they give visual enhancement and appeal without overwhelming the sight. More neutral shade can be seen on the wall, reflecting the warmth provided by most comfortable chairs in the room. The matte surfaces reduce glare due to the properly placed window allowing enough light to enter. The classroom has a nice matte finish with shiny, polished surfaces and solid-color chairs, which make the classroom's aesthetic appeal and functionality quality really stand out. The design on acoustics gives a feeling of quiet within the classroom, with low reverberation providing no distractions for students during a lecture. Such an effect creates comfort through nice finishing and the best use of materials. Less-odorous synthetic items contribute toward cooling and serve to provide the intended neutral equilibrium the classroom harbors. Broad classroom, with the requisite ceiling heights, while containing two walls, it can provide the required environment for a broad yet intimate learning area. This arrangement maximizes the sitting views and engagements while encouraging movements. Desks and chairs are usually typical and symmetrical to make visible forms and shapes within the space. The design, simply, is more straightforward due to instructions than environments. The classroom follows a 3-D geometry that features regularity and emphasizes movement throughout space. Small pieces of ornaments that have real meaning or functional use, in turn, are offset to have an appropriate balance of material without completely clogging up the room. All in all, the classroom design is able to inefficiently blend the practical issues with a smart

aesthetic to create a focused and relaxed, preparing learning environment.

- **Auditoriums and Lecture Halls:**

Functional and comfortable, the lecture hall creates a professional and relaxing ambiance. Cold tones and monochrome color schemes help focus and remove visual distractions. Light, neutral walls match the robust synthetic seating with deep purple upholstery. The polished seats last and match the room's tidy look. Smooth, matte hall surfaces prevent overhead illumination glare, assuring eye comfort. Matte surfaces contrast well with glossy flooring, which is easy to clean and adds elegance. Polished surfaces reflect window light, brightening the space without dominating it. The lecture hall has significant reverberation and a peaceful atmosphere. This setup evenly distributes sound, allowing speakers' voices to reach all corners of the room. The medium ceiling height, corresponding to the room's breadth, improves sound clarity and openness. Low-odor synthetic furnishings and finishes create the delicate olfactory ambiance. This option adds comfort and emphasizes the room's focus. Regular, symmetrical shape and horizontal orientation maximize visibility and accessibility, making the area feel orderly and tidy. The room's minimalist form and clear lines reflect its purpose: to improve communication and learning. A simple, practical podium at the front draws attention to lectures and presentations. These design aspects make the lecture hall inspiring and efficient for students and instructors.

- **Laboratories:**

The monochrome color palette and cool tones provide a professional atmosphere in the lab. The clean, neutral white walls improve concentration by reducing visual distractions. Smooth surfaces simplify cleaning and hygiene. Surfaces are matte reflective to reduce overhead illumination glare, assuring user comfort and functionality. Most materials are synthetic and polished for durability and aesthetics.

This option protects against frequent use and matches the laboratory's high-tech equipment, including rows of sleek monitors and workstations. Like most labs with hard, shiny surfaces, the area reverberates. The slightly noisy atmosphere is useful in cooperation and equipment rooms. Low-odor materials create a relaxing atmosphere despite the lab's busy activity. The lab's spacious layout accommodates many users without crowding. Its medium-height ceiling accommodates overhead projectors and lights while keeping the space open and airy. The lab's symmetrical design and arranged furnishings and equipment reflect its role. Though the 3D geometry is standard, modest furniture arrangement modifications add versatility. Workstations are positioned horizontally to optimize movement and workflow. Beams and windows give architectural character without overpowering the design. Polished and matte finishes blend style and function. Matte surfaces minimize light reflections, but glossy displays and tabletops add visual contrast and sophistication.

- **Restrooms:**

Faculty public restrooms prioritize hygiene, functionality, and comfort. Light blue or green walls and warm beige floor tiles provide a harmonious color scheme. This combination produces a clean, tidy, and relaxing atmosphere. Polished synthetic walls, dividers, and fixtures are durable and easy to maintain. The matte reflecting surfaces reduce glare and provide subtle elegance, making the area utilitarian and attractive. Reverberation from hard, smooth surfaces like tiled floors and synthetic dividers makes the restroom noisy. Low-odor materials create a neutral, clean aroma that calms the environment despite the sound levels. The restroom's lengthy dimensions and medium-height ceilings maximize practicality, ventilation, and movement. The asymmetrical arrangement of urinals, sinks, and stalls complements the regular geometric shapes of the partitions and fixtures, adding variety while making the plan

efficient. With horizontal spatial orientation for easy navigation and accessibility, the restroom design is straightforward and utilitarian. Polished surfaces, especially sinks and urinals, are easy to clean and stain-resistant, improving hygiene. Public bathrooms combine functionality and aesthetics nicely. The complementing color palette and peaceful mood make the room welcome and user-friendly, while the carefully selected materials, textures, and finishes ensure durability and cleanliness. This intelligent design shows the faculty's dedication to customer satisfaction and efficiency.

- **Corridor:**

Monochromatic colors like light grays and whites offer a peaceful, clean environment for quiet, focused movement. The smooth walls and floors and matte reflecting coating reduce glare and improve visual comfort while keeping a professional, polished appearance. Smooth finishes make corridors easier to clean and maintain, which is important for high-traffic areas. Synthetic materials dominate the corridor design for durability and functionality. Modernize the room with polished synthetic flooring, which resists wear and tear and has a slight sheen. The corridor's polished walls and floors create a clean, orderly look. Long and narrow with medium-height ceilings, the space is efficiently used to allow unencumbered mobility. The corridor, doors, and windows' symmetrical or regular geometric shapes establish order and harmony. Design minimalism stresses function without visual clutter. Horizontal spatial orientation helps users navigate the corridor. The corridor has low reverberation. The careful selection of sound-reducing materials creates a serene atmosphere in a busy faculty building. The faint, neutral aroma from low-odor synthetic materials adds to the peaceful mood. Regular 3D geometry with little decoration characterizes the corridor. Doors and built-ins blend with the design. This careful planning keeps the corridor functional, accessible, and attractive. These design choices create a hallway

that is functional, attractive, and inviting.

- **Staircase:**

The Faculty of Communication and Media Studies staircase takes utility and simplicity into account while creating a relaxing ambiance. White and gray dominate the monochromatic color scheme, creating a professional and minimalist atmosphere. This color matches the staircase's transitional role and decreases visual distractions, making it easy to navigate. Synthetic materials were employed for the staircase design due to their longevity and low upkeep. Polished steps are shiny and matte. The polished parts add a slight sheen to the staircase's clean, modern style, while the matte portions decrease glare and avoid slippage. Smooth surfaces are practical for frequent use, keeping the stairs clean and attractive. The staircase's small, vertical shape optimizes floor-to-floor mobility. Medium height blends functionality and accessibility, making it pleasant for all users. The staircase's symmetrical and regular shape creates a harmonious and simple design, reflecting its position as a building connector. Sound-absorbing materials and an enclosed structure make the stairs quiet. Even in a busy environment, this design keeps the space quiet. The space's relaxing effect is enhanced by low-odor synthetic materials' faint aromatic ambiance. The staircase has consistent 3D geometry and little decoration. User safety is ensured by elegantly integrating handrails into the staircase's sleek look. The vertical arrangement emphasizes floor connectedness and flow, confirming the space's function. The staircase's careful design blends practicality and simplicity, making it safe, efficient, and attractive.

Apendix C: Inventory Table of Communication & Media Studies Faculty

Faculty of Communication & Media Studies	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room		■		■				■		■			■		■	■			■			■			■		■		■		■		■		■	
	Lecture Halls & Auditoriums			■	■				■		■			■	■		■			■	■		■			■		■		■		■		■		■	
	Laboratories			■	■				■		■			■		■		■		■			■			■		■		■		■		■		■	
	Public Restrooms			■	■				■		■			■		■		■		■			■			■		■		■		■		■		■	
	Corridors			■	■				■		■			■		■		■		■			■			■		■		■		■		■		■	
	Staircases			■	■				■		■			■		■		■		■			■			■		■		■		■		■		■	

Appendix D: Filling out the analysis Inventory Table of the Faculty of Dentistry

- **Classrooms:**

The classrooms inside Dentistry faculty are nice and plain, useful to provide a thoughtful experience and involvement. The warm and muted colors help tie together the optical experience to reduce any distractions. Smooth, unbroken surfaces discourage dazzling light, thereby achieving an appearance that is clean, comfortable and calm. Polished smooth, hard, and simple-to-maintain synthetic materials modernize the classroom. Besides this, the reverberation within is very high and acoustic suppression is substantial, maintaining very clear speech transmission and concentration. Low odor product ensures an excellent learning environment. A Long Wide is not much way for good space planning for a large number of students without anxiety and discomfort. The symmetry and regularity shape up space and promote order among different simple geometrical forms. Horizontal space orientation and minimal design iterations will give the classroom a clear priority toward function and accessibility. Room functional elements and attractiveness, thereby formulating a blend between aesthetics and comfort, make great academic environments.

- **Auditoriums and Lecture Halls:**

Faculty of Dentistry lecture halls are serene and professional. Monochromatic and cool colors create a concentrated, distraction-free environment. Smooth and matte surfaces reduce glare, while polished synthetic materials are durable and easy to maintain, giving the area a sleek, modern look. Low reverberation and silent lecture halls ensure clear communication and minimize noise disturbances. Low-odor materials add subtle olfactory aspects to the soothing ambiance. Long, wide lecture halls provide enough seats while maintaining openness and accessibility. Medium-height ceilings improve

airflow and acoustics, creating a balanced and comfortable space. The design's symmetrical layout and simple geometric forms convey order and structure. Practical horizontal spatial orientation with minimal alterations promotes movement and engagement. These design components create functional and attractive lecture halls. Comfort, clarity, and simplicity in lecture halls promote focus and involvement, addressing the demands of students and lecturers in a suitable academic setting.

- **Laboratories:**

Functional, straightforward, and versatile in adaptation, the laboratory of the Dentistry Faculty provides an efficient professional workspace. The palate is cold and monochromatic, which benefits scientific work and experimentation. The texture is so matte and smooth to prevent glare and provide for easy cleaning and maintenance. Built of hard-wearing synthetic materials, polished materials provide use over a long time and are thus quite contemporary as laboratory furniture. This is a wide reverberation and a noisy laboratory due to energy efficiency typical of very active equipment and collaboratively in scientific activities. In the meanwhile, with a mild odor ingredient that gives the impression of cleaning and focusing the air; the scent and its calm burner all the time. There are long laboratory spaces to avoid clutter and provide different workplaces. Middle-height ceilings can allow more amount of air and improve acoustics, thereby promoting functionality. These include some degree of symmetry, having simple geometric elements, which brings out orderliness and clarity in them. The horizontal spatial orientation of minimum changes is also included for greater lack of strangeness in the logic of use between the user and equipment. With a thoughtful design, laboratories become functional, delightful, and attractive places for innovative scientific studies and experiments. For all this, they have designed their laboratories to favorite academic and scientific standard conditions and

according to their compact essentials, cleanliness, and convenience of use.

- **Restrooms:**

The washroom setup is very neat and useful to use: with a great concern on maintenance and comfort such as designing by monochrome, cool tones: gray and white walls and dividers-that correlate in accordance with the cleanliness and professionalism. Matte and smooth surfaces reduce the amount of reflection while minimizing maintenance for practical and aesthetic gains. The synthetic materials are used mainly to resist wear, and a polish finish gives a clean, modern touch. Very reverberant because of hard surfaces, the area is silent, ensuring privacy and no auditory distractions. Clean, soft scents of soap dispensers and cleaning materials create a soothing fragrance, and define the function and ambiance of a clean environment where anyone can enjoy to enter. Because of the length and narrowness of the space, the restrooms offer several stations for use without appearing too cramped. The medium-height ceiling space provides as balanced open space. Symmetrical and regular design together with simple navigation results in an aesthetically harmonious and functional space. This makes it usable and realistic. Tiled walls and floors keep the area clean and can always be sanitized, while the polished ceramic wash-basins manage to complement the polished surfaces. They are sturdy, capable of standing up to excessive loading and everyday use, and provide lots of flexibility options for design. At the end, a washroom emerges through appropriate design decisions, which is clean, practical, and has enjoyable users at its heart. The usage demands of the user can thus be met, while updates are certainly up-to-the-minute through strong and durable materials, as well as a layout that is functional without sacrificing aesthetics.

- **Corridor:**

Corridors will foster what may well be their key purpose of transition or movement: calmness and professionalism, supported by utility. Monotone color palettes and very cool hues of walls-mostly white and gray-provide the backdrop for a calm, neutral design. The possibility of reducing overall visual noise and channelizing the movement of the corridors gives them the appearance of being quite roomy and organized. The smooth walls and ground plane make for a slick design, where minimal maintenance is required. Corridors' materials are meant to reflect diversely, combining the matte and the glossy. Matte surfaces on walls reduce overhead light glare, which ensures improved comfort for the occupants, while the glossy flooring material provides a further touch of sophistication and durability. Materials are mostly synthetic, except when they decide for durable and beauty reasons. Highly polished tile and wall panel may create an elegant finish. The lengthy, narrow corridor and rugged surfaces cause an incredible reverberation, but instead makes it sound silent and actually maintains a peaceful atmosphere. Cleaners and achromatic air fresheners certainly avoid introducing just about any strong scent into the space. This serves as an ideal site for learning and institutional transition settings. With long and narrow corridors and medium-high ceilings, walking in the corridor apparent to be maximized, and at the same time, they make the space feel less crowded. Their regular and symmetrical organization helps to clear the bearings and merely to see order and structure in the forming of corridors. The practicality is emphasized by great simplicity in design, as additional decoration tends to look awkward. The corridors in their 3D forms appear very consistent lengthwise or horizontally elongated forms. That approach maintains the very advantageous flow because it is polished materials and linear lighting fixtures that tend to direct the horizontal movement contributes to these great straight lines.

Such a meticulous interplay of colors, materials, and finishes sounds very effective yet attractive, thus appealing but not exaggeratedly ornate. They provided intelligent use of corridors, matching these with the design under the building.

- **Staircase:**

Simple and efficient, the facility's stairway emphasizes safety, accessibility, and a peaceful atmosphere. The area is brightened by chilly tones like light beige and white. This basic monochromatic palette helps focus and reduces visual clutter. White walls give clean, uncomplicated style and reflect natural and artificial light, minimizing shadows and improving visibility. Synthetic materials are employed in the staircase for longevity and low maintenance. The steps are smooth, shiny polished terrazzo. Matte materials reduce glare and provide comfort, while glossy steps and flooring add elegance and durability. Polished surfaces make cleaning easy, keeping the atmosphere clean. The staircase's high reverberation intensifies sound without becoming loud. This peaceful environment helps professionals focus. The neutral, clean aroma of low-odor materials enhances the user experience. The staircase is long and narrow, vertically connecting floors and maximizing space. The medium-high ceiling creates a balanced space. The staircase's symmetry creates order and harmony. Simple layout and consistent 3D geometry make it easy to navigate and meet the space's functional and accessible requirements. Safety and aesthetics are enhanced by metal handrails. Durable and easy to clean, their shiny metallic surface matches the design. The big windows near the stairs let natural light in, relaxing the area and decreasing daytime lighting needs. The staircase balances form and function, creating a professional, safe, and attractive atmosphere.

Apendix D: Inventory Table of DentistryFaculty

	Common Functions	Photos	Identity												Identity													Identity									
			Color						Texture				Material		Sound				Smell		Dimension							Shape				Form					
			Color Group		Color Scheme				Surface Quality		Reflective Quality		Type		Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion				Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
			Warm	Cold	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Natural	Synthetic	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
Faculty of Dentistry	Class Room	 	▨		▨				▨		▨			▨	▨		▨			▨	▨		▨			▨		▨		▨		▨		▨		▨	
	Lecture Halls & Auditoriums	 		▨	▨				▨		▨			▨		▨	▨			▨	▨		▨			▨		▨		▨		▨		▨		▨	
	Laboratories	 		▨	▨				▨		▨			▨	▨			▨		▨	▨		▨			▨		▨		▨		▨		▨		▨	
	Public Restrooms	 		▨	▨				▨		▨			▨	▨		▨			▨	▨			▨		▨		▨		▨		▨		▨		▨	
	Corridors	 		▨	▨				▨		▨	▨		▨	▨		▨			▨	▨			▨		▨		▨		▨		▨		▨		▨	
	Staircases	 		▨	▨				▨		▨	▨		▨	▨		▨			▨	▨			▨		▨		▨		▨		▨		▨			▨

Appendix E: Filling out the analysis Inventory Table of the Faculty of Education

- **Classrooms:**

The Faculty of Education classroom is useful and relaxing. A cool, monochrome palette with soft white or light beige walls is used. These neutral colors create a calm, peaceful ambiance, while the desks and chairs in muted blue and grey match the design and add order. Classroom supplies are chosen for longevity and utility. Walls are smooth and painted with synthetic, washable paint for simple maintenance. Polished, shiny tiles give the room a clean, professional look. Synthetic materials like reinforced plastic and aluminum make the desks and chairs solid and durable. Matte furniture reduces glare and improves student vision. The silent classroom with reduced reverberation promotes concentrated learning. Smooth surfaces and little decoration provide this look. Synthetic finishes and other materials create a neutral, mild smell that keeps students and staff comfortable. Room dimensions and proportions are well-planned. With medium-height ceilings, the classroom is spacious but intimate, encouraging interaction. Symmetrical workstations and chairs emphasize structure and order, while the spacing allows movement. Regular shapes and simple geometry emphasize functionality over adornment.

- **Auditoriums and Lecture Halls:**

The Faculty of Education lecture hall is warm, inviting, and focused for presentations and conversations. With soft white walls and crimson chairs, the monochromatic palette is warm. These hues create a relaxing but engaging atmosphere, while the seating pattern emphasizes order and usefulness. Lecture hall materials emphasize durability and upkeep. Smooth walls and synthetic, washable paint make them durable and easy to maintain. Polished matte floors and other surfaces balance the room's

aesthetics and functionality. Synthetic materials like reinforced plastic and padded cloth make the seating comfortable and durable. Matte chair surfaces prevent visual glare, ensuring comfort over time. The lecture hall's acoustics create a distraction-free setting with minimum reverberation. Strategic use of smooth surfaces and minimal decoration achieves this look. The materials also provide a neutral, faint scent, making the space suitable for long-term use. With its long and wide architecture, the hall can accommodate huge audiences while preserving an intimate ambiance. The medium-height ceiling adds space without being overbearing. Symmetrical seating adds structure and equilibrium. Regular, uncomplicated room shape promotes functionality and usability.

- **Laboratories:**

The Faculty of Education laboratory is functional and peaceful to facilitate concentrated research activity. Cool, homogeneous walls are painted in soft white or light gray. Neutral hues convey cleanliness, professionalism, and serenity. A laboratory needs order and practicality, hence monochromatic is used. Lab supplies are chosen for longevity, hygiene, and upkeep. Smooth, synthetic, washable paint makes the walls easy to clean and resistant to chemical spills. Worktops, desks, and storage units are made of synthetic materials such reinforced plastic or laminated surfaces to resist regular use. Polished matte finishes reduce glare and are easy to maintain. Since various activities, discussions, and equipment make sound, the lab is noisy. Still, the mood is peaceful and productive. The careful arrangement and use of sound-reducing materials can reduce the excessive reverberation found in smooth, hard surfaces. Odor-wise, the lab is neutral. Students and staff are comfortable because synthetic materials and ventilation systems reduce lab odors. A lengthy layout allows people to move and participate in the lab. With its medium-height ceiling, the space

seems open without being overbearing. The symmetrical placement of workstations and equipment promotes efficiency and focus. The room's regular shape stresses functionality and usability. The lab's design integrates standard 3D geometry with seamlessly connected workstations and storage units. The horizontal room layout promotes mobility and efficiency.

- **Restrooms:**

The Faculty of Education public restroom prioritizes functionality and hygiene. Light beige and gray dominate the walls, partitions, and tiles in the frigid, monochrome concept. These colours are clean and professional, creating a peaceful mood despite the space's practicality. Durability, hygiene, and upkeep are prioritized in restroom materials. Synthetic walls and partitions have a smooth, polished matte texture that is moisture-resistant and easy to maintain. Polished tile flooring is clean and slip-resistant. In a high-traffic environment like a restroom, matte reflective quality reduces glare and keeps things tidy. The restroom is noisy due to hard, flat surfaces that enhance sound. This is typical for such spaces, which prioritize convenience over sound absorption. Good ventilation and hygienic cleaning solutions keep the olfactory atmosphere modest and neutral. The restroom's wide dimensions make it easy to use. Medium-height ceilings give openness without being overbearing. The uneven, asymmetrical design divides sinks, toilets, and urinals while maximising space. The minimal design ensures clarity and usability despite the asymmetry. Formally, the restroom has uneven 3D geometry with fluidly connected sinks, partitions, and stalls. The horizontal orientation makes the room easy to maneuver.

- **Corridor:**

The Faculty of Education corridor is meticulously planned to provide a functional and peaceful route between building components. White and gentle gray wall and ceiling

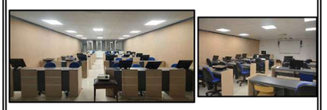
colors dominate the cool, monochrome palette. This neutral colour creates a calm, professional atmosphere by emphasising cleanliness and order. The corridor's materials prioritize endurance and beauty. Smooth walls with synthetic, washable paint ensure easy maintenance and wear resistance. The corridor's glossy polished tiles reflect light and give it a sleek, modern look. For such a busy area, the shiny finish creates an impression of space and cleanliness. Despite smooth and reflecting materials' significant resonance, the corridor is quiet. Thoughtful design and little clutter create a peaceful, focused, and moving environment. Synthetic materials with little odor and sufficient ventilation keep the olfactory atmosphere mild and neutral. Long and wide, the corridor allows for easy pedestrian flow and reduces congestion. The medium-height ceiling promotes openness without dominating the area. The layout emphasizes structure and balance with a symmetrical and regular shape, while the design emphasizes functionality with little decoration. The hallway has normal 3D geometry and effortlessly integrates signage, doors, and safety equipment. For students, instructors, and staff, the horizontal orientation facilitates movement and accessibility.

- **Staircase:**

The Faculty of Education stairway is efficient and peaceful. The cool, monochromatic color palette uses soft, neutral tones like white and light gray. These hues produce a clean, organized ambiance that matches the building's design. Smooth walls with synthetic, washable paint make maintenance easy and durable. Natural materials like polished stone or marble give the staircase a refined look. The steps' shiny texture adds elegance and functionality by reflecting light and brightening the environment. The metal railings, presumably stainless steel, add style and durability. The stairway has considerable reverberation but is silent, creating a peaceful setting for visitors to

navigate between floors. The space's natural materials and well-ventilated construction may explain its neutral, mild scent. Polished surfaces and minimal furnishings give it a clean, professional vibe. The compact staircase with medium-height ceilings balances functionality and space. In high-traffic areas, its uniform, symmetrical design provides structure and order. The simple form makes it efficient, and the vertical orientation connects levels.

Apendix E: Inventory Table of Education Faculty

Faculty of Education	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room			■	■				■			■		■	■		■			■			■		■		■	■	■		■		■		■	
	Lecture Halls & Auditoriums		■		■				■		■			■		■	■			■	■		■		■		■	■	■		■		■		■	
	Laboratories			■	■				■		■			■	■		■			■			■		■		■	■	■		■		■		■	
	Public Restrooms			■	■				■		■			■	■		■			■			■		■		■	■	■		■		■		■	
	Corridors			■	■				■		■			■	■		■			■			■		■		■	■	■		■		■		■	
	Staircases			■	■				■		■			■	■		■			■			■		■		■	■	■		■		■		■	

Appendix F: Filling out the analysis Inventory Table of the Faculty of Engineering

- **Classrooms:**

A deliberate mix of warm and cold colors creates a harmonious and pleasant ambiance in the Faculty of Engineering classroom. Soft white walls and polished wooden workstations create a comfortable, stable atmosphere. The deep crimson seats add brightness without dominating the space's tranquility by adding a cool aspect. The space uses a mix of natural and manmade materials for durability and functionality. The desks and seats' matte, smooth surfaces reduce lecture distractions. The walls are painted with washable paint for easy maintenance and durability, while the polished wooden components give a professional and clean look. The classroom's low reverberation and quiet atmosphere promote concentrated concentration and clear communication. Natural and synthetic materials give the area a mild, neutral scent that comforts students and instructors. The classroom has a wide layout for comfortable seating and a medium-height ceiling for an open, intimate sense. The symmetrical workstations and chairs emphasize order and functionality, while the simple geometric forms keep the area clean and learning-friendly. The horizontal room layout allows good views of the teacher and presentation boards. Ergonomic seating and modern projectors and screens emphasize both conventional and new teaching methods. This classroom combines beauty and usefulness to foster learning and collaboration.

- **Auditoriums and Lecture Halls:**

The lecture hall's monochrome blue and white color scheme and cool color group are well-designed. Blue seats and neutral white walls create a calm, professional atmosphere. This relaxing location helps students and professors focus. The long, wide room with a medium-height ceiling mixes openness and intimacy, making it inviting

but structured. Symmetrical seats create a professional, structured atmosphere, while the tiered layout guarantees everyone can see. Durable and useful materials are employed throughout the space. Synthetic, washable paint gives the walls a matte sheen and smooth texture. Light reflection is reduced, preventing presenting distractions. The seating is made of reinforced synthetic materials with blue padded fabric for comfort and a matte surface to reduce brightness. The polished synthetic or vinyl flooring provides the space a clean, professional look. The glossy finish brightens the environment without overpowering it. Smooth and shiny surfaces cause strong reverberation and a raucous atmosphere when the hall is filled. The fabric-covered seats modestly attenuate sound, boosting speech clarity during lectures and presentations. Well-spaced overhead fluorescent or LED lights illuminate the hall evenly. This design lets lecturer and audience see clearly, improving engagement and focus. Windows with blue shades match the seating and create a coherent look. These blinds manage natural light, preventing projector screen glare during presentations. Modern technology like a projector and screen make the hall useful for academic and professional use. Proper airflow and neutral, synthetic materials create a welcoming, hygienic fragrance. Matte walls and seating prevent glare and optical strain, but glossy polished floors reflect light strategically and look bright and clean.

- **Laboratories:**

The Faculty of Engineering labs are practical and efficient. Monochromatic, chilly colors provide a clean, professional ambiance that encourages focus and productivity. Smooth walls painted with synthetic, washable materials make cleaning easier and maintain a consistent appearance. Matte reflective material lowers glare and improves visibility on computer screens and lab equipment. The mostly synthetic furniture and fixtures are polished to express cleanliness without distracting shininess. Plastics and

coated metals are used for their durability and lab use. The long, wide room and medium-height ceilings create an open, efficient space for organization and mobility. Equipment and user interaction make the lab noisy. A delicate olfactory ambiance keeps the space neutral and free of harsh aromas, creating a tranquil and concentrated setting. The lab emphasizes order and practicality with symmetrical and regular geometric forms. This simple but effective design reduces visual clutter and increases space use. Its organized layout is enhanced by horizontal orientations and clearly defined workstations.

- **Restrooms:**

Engineering's public restroom has cool, monochrome colors with clean, neutral tones. The walls and dividers are mostly covered with smooth, polished white synthetic tiles. Matte reflective tiles reduce glare and create a balanced, modest look. The glossy finish makes the room easy to clean and stain-resistant. Large dark gray floor tiles lend depth to the room by contrasting with the brighter walls. Durable and moisture-resistant synthetic floor tiles are practical in a high-traffic area like a restroom. The restroom's smooth, hard walls, floors, and dividers increase resonance, making it mildly noisy. Proper ventilation and no strong odors keep the olfactory atmosphere modest and neutral. Clean and serene surroundings keep the space practical and welcoming. The restroom is large and broad, with medium-height ceilings for airflow and no sensation of constriction. The symmetrical placement of sinks, urinals, and stalls offers order and structure. The simple design prioritizes function over adornment. Regular lines and right angles dominate the restroom's 3D geometry. Horizontal characteristics like tiled walls and dividing lines add solidity and cleanliness. Mirrors, hand dryers, and paper towel dispensers blend into the design, transforming it subtly.

- **Corridor:**

Functional and monochrome, the Faculty of Engineering hallway uses neutral tones like light gray and white. Smooth synthetic paint with a matte reflective quality gives the walls a gentle, subtle look. This approach decreases glare, making corridor walkers more comfortable. The glossy synthetic tiles on the floor are easy to clean and durable, giving it a professional look. Due to the corridor's smooth and firm walls and floor, reverberation is strong. This makes the place noisy, especially when busy. The olfactory environment is modest, with no strong aromas, possibly due to efficient circulation that keeps the air neutral and fresh. The corridor is short and tight, with medium-height ceilings to avoid claustrophobia. In contrast to long, homogeneous halls, the corridor's uneven shape and asymmetrical layout add movement. The simple design emphasizes utility, ensuring the area works without extraneous decorations. Recessed lighting, signage, and doors blend with the corridor's irregular 3D shape. Transport is facilitated by the corridor's horizontal design, which highlights its length.

- **Staircase:**

The Engineering Faculty staircase is efficient and attractive. A monochromatic palette of white and beige tones creates a cool, clean atmosphere. Smooth walls and synthetic, washable paint ensure longevity and ease of upkeep. The polished natural floor and stairs tiles appear professional and are practical for frequent foot traffic. The stairs' polished wood-and-metal handrails bring warmth to the chilly tones. The polished tiles and handrails are clean and durable, while the reflecting matte walls reduce glare. Although the open space and rough materials cause considerable resonance, the environment is calm. The neutral smell may come from polished wood and tiles. The spacious proportions and medium-height ceilings let people roam freely and create a tranquil atmosphere. Its proportions and symmetry underscore the staircase's utility

and order. Practicality is emphasized by consistent 3D geometry and simple lines and shapes. Vertical orientation, signage, and illumination complete the design by improving visibility and navigation.

Apendix F: Inventory Table of Enginnering Faculty

Faculty of Engineering	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room																																					
	Lecture Halls & Auditoriums																																					
	Laboratories																																					
	Public Restrooms																																					
	Corridors																																					
	Staircases																																					

Appendix G: Filling out the analysis Inventory Table of the Faculty of Health Science

- **Classrooms:**

Cold, monochrome tones make the Faculty of Health Science classroom peaceful and practical. An even, soothing white wall background helps concentrate and reduces distractions. Synthetic washable paint was used on these walls for longevity and simplicity of upkeep. The smooth, matte finish prevents reflections from hindering classroom use. Polished synthetic tiles give the floor a clean, professional look. Polished tiles improve the room's cleanliness and reflectivity, brightening it without overpowering the quiet environment. The room's architecture reduces sound reverberation, allowing lectures to be heard despite the reflective floor. Reinforced plastic and aluminum desks and chairs are used. The durability and affordability of these materials ensure lifespan despite intense daily use. Muted blue-gray furniture complements the monochrome color scheme and adds depth. Matte chairs reduce glare and improve student comfort during long study sessions. Dark navy shutters on the windows allow for illumination adjustments during presentations and other events. These blinds manage natural light and maintain the room's clean, symmetrical form, soothing it. Free of strong smells, the classroom exudes cleanliness and order. The space is large and airy, with medium-height ceilings that avoid confinement. Furniture and instructional materials like the whiteboard and projector are symmetrical to create balance and order. Horizontal layout stresses functionality, with appropriate room for movement and accessibility.

- **Auditoriums and Lecture Halls:**

Lecture hall is supposed to be peaceful and structured to improve focus and learning. A neutral and professional atmosphere is created by the cold, monochromatic blue and beige palette. This color design focuses on the lesson rather than the surroundings. The walls have a smooth, synthetic, washable finish that is attractive and easy to maintain. Gentle beige tones create a relaxing atmosphere, while robust synthetic doors are painted to match the design. The seating's muted blue cloth matches the room's color scheme and looks professional. Strong synthetic materials make the seats robust and easy to maintain. Their matte texture decreases overhead illumination glare for long-term comfort. The polished, smooth synthetic flooring is functional and attractive. Its smooth texture makes cleaning easy and lasts long, while its reflective surface brightens the room. Space acoustics are optimized for reduced reverberation. Upholstered seating and sound-absorbing walls make the hall quiet, allowing the speaker to be heard. This room is ideal for lectures and presentations due to its acoustic balance. The room's mild smell, possibly from clean synthetic materials and occasional cleaning agents, make it fresh and comforting. The room's vast width and medium-high ceilings balance openness and intimacy. The symmetrical seating configuration promotes order and allows all participants to see the stage and presentation. The regular, straightforward geometric shape emphasizes practicality over adornment. Presenters and audience members can see well thanks to above matte ceiling panels that eliminate harsh shadows.

- **Laboratories:**

Functionality and practicality are combined to create a relaxing and productive studio. Warm, homogeneous beige and light brown tones evoke comfort. Smooth, synthetic, washable paint makes the walls easy to clean. A laboratory needs durability and

hygiene, which this finish provides. The warm wall colors and polished synthetic furniture and surfaces create a professional but pleasant ambiance. The laboratory has matte and glossy surfaces for different purposes. A bright environment and simpler sanitization are achieved with glossy workbenches and counters. Matte furniture and fixtures reduce glare, improving visual comfort for extended workdays. The synthetic flooring is polished for cleanliness and durability to withstand lab equipment and foot activity. Due to equipment functioning and user conversations, the lab is slightly noisy. Low reverberation in the area helps control sound and prevent excessive volume. Wall and ceiling materials provide an acoustic equilibrium that facilitates communication and collaboration. The laboratory's clean, synthetic surfaces and occasional cleaning agents give it a neutral fragrance. The laboratory's long, expansive dimensions and medium-height ceilings allow ventilation and openness. The asymmetrical architecture accommodates multiple workstations and equipment, expanding experimentation and task flexibility. Despite the space's irregular shape, furniture and equipment are meticulously arranged for efficiency and accessibility. Horizontal room orientation emphasizes laboratory operations' linear flow. The laboratory's uneven 3D design reflects its many activities, including chemical work, analysis, and storage. The area is enhanced by cupboards, shelving, and specialist equipment that blend in. The laboratory uses plastic, stainless steel, and polished surfaces because they are durable, easy to clean, and chemical- and stain-resistant.

- **Restrooms:**

A warm, neutral beige and cream color choice makes the public restroom practical, hygienic, and appealing. The clean, relaxing atmosphere of these hues improves user experience. The smooth, polished walls are comprised of natural and manmade materials. Easy cleaning and upkeep are crucial for restroom hygiene, and this finish

improves aesthetics. The bathroom's walls, countertops, and partitions are matte reflective. User comfort and a modern, subtle style are achieved by minimizing overhead lighting glare. Polished flooring adds cleanliness without reflecting light. Natural and synthetic materials like ceramic tiles, polished stone, and sturdy plastic offer durability and sanitation. Low reverberation maintains sound in the restroom. This makes it more private and pleasant. The restroom smells fresh without being overbearing due to excellent ventilation and periodic application of mild cleaning chemicals. Long and airy, the restroom has medium-height ceilings that give an open, uncluttered feel. The layout is symmetrical, with sinks, mirrors, and stalls balanced. Symmetry gives the room a sense of order and accessibility. The restroom is regular and horizontal, allowing for easy circulation and maximal space use. Towel dispensers, hand dryers, and mirrors are perfectly integrated into the restroom's 3D geometry. These items are strategically placed to improve functionality and keep the space tidy. To ensure durability and ease of maintenance, glossy tiles and synthetic fixtures were used for moisture and wear resistance.

- **Corridor:**

This cool, monochrome hallway uses white and light grey to create a relaxing and effective transition zone. Colors and medium-height ceilings create an open, light area that feels larger and more inviting. Walls and doors are composed of durable plastics or laminates for low maintenance and wear. Smooth, glossy walls are easy to clean and reflect little light, preventing glare. A modest sheen from polished vinyl or tile flooring gives the hallway a clean, professional look without being too reflecting. The matte walls and ceiling minimize distractions and create a unified appeal, while the smooth surfaces create a straightforward and structured design. Despite lengthy, narrow rooms' strong resonance, the corridor is peaceful. Minimal noise and careful

material selection make the hallway pleasant and functional for learning. By using neutral cleaning chemicals and sufficient ventilation, the environment smells fresh and pleasant without being overpowering. Structure and navigation are emphasized by the corridor's long, narrow, symmetrical design. The design promotes movement with uncluttered pathways. People can easily go in both directions due to the space's horizontal orientation. The corridor has normal 3D geometry and features notice boards, lighting fixtures, and signage that blend into the design. The space's minimal complexity makes it easy to explore and attractive. The corridor's polished surfaces and synthetic materials provide longevity and cleanliness, while the monochrome palette calms and focuses.

- **Staircase:**

This staircase blends functionality with a cozy look. A homogeneous warm color scheme of beige or light brown produces a relaxing atmosphere. These colors and the middle height make the space feel cozy and approachable. Wood and stone are used for the staircase's walls and handrails, adding durability and organic charm. Smooth surfaces with polished finishes make materials easy to clean and maintain. Matte reflective walls and steps reduce glare, assuring user safety and comfort. This careful design creates a functional and attractive workplace. The polished-matte finish avoids distracting or slippery shiny surfaces. The staircase's low resonance makes floor-to-floor mobility peaceful. Solid, natural materials absorb sound, decreasing echoes. The delicate, clean aroma from natural airflow and neutral cleaning agents keeps the space fresh and pleasant without overbearing scents. Narrow staircases emphasize functionality, clear routes, and space conservation. Regular staircase shape stresses structural order, but subtle asymmetry in handrails and landings adds visual appeal. Safety features, railings, and lighting fixtures that match the design are added to the

staircase's conventional 3D geometry. Vertical stairs naturally lead the eye upward and create a sense of transition and connection across levels. Its simplicity in complexity makes it easy to browse and attractive without extra decoration.

Apendix G: Inventory Table of Health Science Faculty

Faculty of Health Science	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room			■	■				■		■			■	■		■			■	■					■			■		■		■		■		■	
	Lecture Halls & Auditoriums			■	■				■		■			■		■	■			■			■			■			■		■		■		■		■	
	Laboratories		■		■				■		■	■		■		■		■		■			■			■			■		■		■		■		■	
	Public Restrooms		■		■				■		■		■	■		■	■			■			■			■			■		■		■		■		■	
	Corridors			■	■				■		■			■	■		■			■			■			■			■		■		■		■			■
	Staircases		■		■				■		■		■			■	■			■			■			■			■		■		■		■			■

Appendix H: Filling out the analysis Inventory Table of the Faculty of Law

- **Classrooms:**

Combining complementing colors gives the Faculty of Law classroom warmth and modernism. Beige or light brown walls with subdued blue furniture provide a welcoming, professional environment that promotes working and learning. Dynamic complimentary colors provide a pleasing balance without becoming overpowering. This clever color choice calms the space. The smooth walls and ceilings are painted with synthetic, washable paint for longevity and ease of upkeep. The glossy polished tiles enliven the room without glare. However, the matte furniture reduces visual strain and makes studying comfortable. The matte and glossy surfaces improve aesthetics and student safety and comfort. Smooth and polished surfaces create significant resonance, although the classroom is supposed to be quiet. Strategic placement of sound-absorbing features like fabric blinds or acoustic panels reduces disturbing noise and promotes focused learning. Regular cleaning and synthetic furniture and finishes give the air a neutral fragrance. The medium-height ceilings and correspondingly broad classroom allow for movement and connection while preserving closeness for focused talks. Symmetrical desks and chairs enhance organization and discipline. The furniture is made of durable materials like reinforced plastic and aluminum to meet the needs of a busy academic area. Formally, the classroom is 3D with clean lines and a horizontal arrangement to highlight functionality. Features like integrated lighting, projectors, and ergonomic chairs improve usage while merging into the design.

- **Auditoriums and Lecture Halls:**

The Faculty of Law lecture halls use a complementary color palette to balance warm and cold tones and combine aesthetics with functionality. Soft beige or light tan walls and subdued blue seats create a visually engaging but peaceful ambiance for lengthy periods of engagement. The lecture hall's warm and cool colors show its professionalism and friendliness. Smooth hall surfaces make cleaning and maintenance easy. Matte synthetic, washable paint covers walls and ceilings to reduce glare and improve visibility. Polished tile flooring adds brightness without distractions with a shiny surface. The seating, made of reinforced plastic and aluminum, has matte finishes to prevent visual strain and keep you comfortable during long lectures. Matte and glossy textures give the hall depth and refinement. Despite considerable resonance from smooth and polished surfaces, the lecture hall is silent. Strategic design components like acoustic panels and sound-dampening walls and ceilings achieve this. These qualities ensure clean, evenly spread sound so everyone can hear the speaker. Regular upkeep of synthetic materials and the absence of strong scents keep the hall's air neutral and fresh. The lecture hall is long and wide, accommodating a big audience while remaining open. Medium-height ceilings balance the space's size while allowing for movement and visibility. Symmetrical seating stresses order and efficiency, making the hall attractive and useful for speakers and students. The hall has uneven 3D geometry and crisp, horizontal alignments. Built-in lighting, projectors, and ergonomic seats merge with the hall's architecture.

- **Laboratories:**

Law Faculty laboratories promote study and experimenting in a peaceful, structured atmosphere. The color scheme is warm and similar, with light beige, warm white, and delicate cream tones. A friendly and focused atmosphere is created by this coherent

palette while maintaining professionalism and functionality. The walls are smooth and coated with washable paint and polished wood accents for longevity and practicality. Matte walls and furniture improve visibility and comfort during detailed tasks. Floors with glossy tiles look elegant and easy to clean, which is important in spill-prone areas. The smooth and polished surfaces cause considerable reverberation, but the acoustics work in a noisy lab. These rooms minimize sound distortion for clear conversation. The laboratory's modest and neutral aromas, usually from cleaning agents or used items, contribute to its cleanliness and professionalism. The laboratory's medium-height ceilings add openness without overwhelming users, while its wide dimensions allow for movement and communication. Workstations and equipment are symmetrically positioned to improve workflow and safety. This design makes all tools and resources accessible, demonstrating the space's thorough planning. The lab's 3D shape is mostly horizontal. Counters, workstations, and shelves are functional with minimal decoration. Polished finishes brighten and organize the area, while matte surfaces on equipment and furniture reduce distractions and promote attention.

- **Restrooms:**

The Faculty of Law's public restrooms are functional, clean, and relaxing. The chilly, monochrome color combination of white, light gray, and muted blue suggests cleanliness and order. These neutral, universally appealing colors match the faculty's professionalism. The walls and surfaces are smooth, painted with synthetic, washable materials for longevity and easy maintenance. Matte walls reduce glare and give the restroom a clean, understated look. The polished floor and counter tiles offer a subtle shine, brightening the area while retaining a professional and hygienic look. Its matte and polished finishes make it useful and attractive. The smooth and rough surfaces of the restroom cause strong reverberation, yet the acoustics are kept quiet to match the

relaxing atmosphere. A neutral, unobtrusive scent from cleaning solutions keeps the environment smelling fresh and clean without overwhelming consumers. Long restrooms provide adequate space for movement and accessibility. The open, enclosed medium-height ceilings blend space and privacy. To maximize convenience and efficiency, sinks, stalls, and urinals are positioned symmetrically. In high-traffic areas, this symmetry creates structure and simplicity. Dividers and fixtures improve usability in the regular 3D geometry. Sinks and countertops are horizontal to accommodate users of all heights and abilities. Popular surfaces like worktops and faucet handles are polished for easy washing and upkeep, which is essential for public restroom hygiene.

- **Corridor:**

Functionality and elegance are combined in the Faculty of Law hallway to create a sense of serenity. A pleasant, professional atmosphere is created with a warm, monochromatic color palette of soft beige or light tan. This muted color scheme makes the corridor feel larger and unifies the building's look. Smooth walls with durable, washable synthetic paint are easy to maintain. With its glossy walls and floor tiles, the area is softly brightened and refined. Plastic laminate panels and polished tiles are utilized in high-traffic areas because they are durable. Glossy surfaces are easy to clean and appear professional. Even though its smooth and reflective surfaces create considerable reverberation, the corridor is peaceful. Architectural design reduces noise, keeping kids and workers calm in the corridor. Proper ventilation and moderate cleaning agents provide a fresh, comfortable olfactory environment. The long corridor's medium-height ceilings mix openness and intimacy. Symmetrical doors, signage, and fittings add order and structure. Practical and attractive, this regular design makes the corridor easy to travel and clutter-free. The corridor's 3D shape is regular with useful irregularities like benches and display board recesses. Users move

naturally around the space due to the horizontal arrangement. Shiny surfaces and smooth textures create a sleek, modern look.

- **Staircase:**

Using a cool, monochrome color scheme of white, gray, and muted blue, the Faculty of Law staircase is utilitarian and peaceful. Professional and calm, these hues match the faculty's intellectual atmosphere. Smooth, synthetic, washable paint guarantees longevity and ease of maintenance on the walls. Neutral tones improve the peaceful atmosphere while looking clean and ordered. Materials like polished stone and metal make up the staircase steps and handrails. Matte-finished stone steps avoid glare and reduce walking hazards. Sleek, modern handrails are polished stainless steel or painted wood. This material mix is durable and modern. The acoustic environment is peaceful despite stairwell reverberation, contributing to the space's calmness. Proper ventilation and gentle cleaning agents create a quiet scent. So even with constant use, the environment feels fresh and pleasant. Narrow stairs and medium-height ceilings create vertical consistency without confining viewers. Asymmetry in landings and handrails adds visual appeal, while the regular shape assures structural stability. The stairs' uniform, vertical 3D design emphasizes their effective floor-connecting function. The staircase's glossy finishes reflect light softly, creating a bright and inviting area. Glare is reduced by matte surfaces like walls, enhancing optical comfort. For academic use, this matte-polished combination balances utility and elegance.

Apendix H: Inventory Table of Law Faculty

Faculty of Law	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Identity: Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Identity: Material: Type: Natural	Material: Type: Synthetic	Identity: Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Identity: Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Identity: Dimension: Proportion: Long	Proportion: Short	Proportion: Wide	Proportion: Narrow	Dimension: Height: Low	Height: Medium	Height: High	Identity: Shape: Type: Regular	Type: Irregular	Shape: Symmetry: Symmetrical	Symmetry: Asymmetrical	Identity: Form: 3D Geometry: Regular	3D Geometry: Irregular	Form: Transformation: Additions	Transformation: Subtraction	Orientation: Horizontal	Orientation: Vertical
	Class Room																																					
	Lecture Halls & Auditoriums																																					
	Laboratories																																					
	Public Restrooms																																					
	Corridors																																					
	Staircases																																					

Appendix I: Filling out the analysis Inventory Table of the Faculty of Medicine

- **Classrooms:**

The Faculty of Medicine classroom is calm and inviting with a warm, monochromatic color palette. Walls and furnishings are smooth thanks to synthetic materials with a polished finish. Smooth surfaces make cleaning and modernizing easy, while matte reflective furniture reduces glare, making students and instructors more comfortable. The classroom uses robust polymers and laminated wood for durability and functionality. The seating arrangement uses symmetrical and regular shapes to provide order and functionality. The short layout and medium-height ceilings make the area small and focused for learning. Due to reduced reverberation, lectures are quiet and clear. Clean materials and appropriate airflow keep the environment fresh without overbearing odors. The room's horizontal arrangement and basic geometric additions improve usage for all.

- **Auditoriums and Lecture Halls:**

Faculty of Medicine teaching halls are intended for comfort and efficiency. Polished synthetic materials and neutral tones create a warm, homogeneous color palette that focuses attention. Matte walls and furnishings reduce glare, helping you focus. This polished finish is easy to maintain and gives the hall a professional look. Synthetic materials make the seating configuration robust and easy to use. The hall is vast but intimate, ideal for lectures and conversations, with medium-height ceilings and generous dimensions. Regular geometric design and symmetrical furniture promote organization and efficiency. Even though the area is large, the quiet acoustics and mild olfactory environment, free of overpowering aromas, assist calm the atmosphere. The minimalist hall's smooth texture and well-placed lights facilitate focused learning

without overloading the senses. Projector displays and podiums flow with the horizontal plan, adding functionality and aesthetics.

- **Laboratories:**

Functionality and efficiency are the core of the Faculty of Medicine's cool, monochromatic labs. Lab surfaces are smooth for easy cleaning and maintenance, while matte reflective properties reduce glare under intense illumination. This option produces a professional, focused lab environment. Synthetic materials with polished finishes can resist frequent use and chemical exposure. The laminated counters and durable plastics assure safety and long-term use, while the polished surface gives the office a clean, antiseptic look. Due to significant reverberation, wide, open areas with smooth surfaces make the laboratory noisy. Due to excellent ventilation systems that regulate chemical and equipment smells, the atmosphere is peaceful and odour-free. Medium-height ceilings and a long lab allow for movement and collaboration. Its regular shapes and symmetrical combinations promote order and navigation. Simple design with little decoration emphasizes functionality over beauty. A practical design approach is reflected in the laboratory's regular 3D geometry. Horizontal orientation matches the room's stretched shape to facilitate several workstations. The laboratory's scientific capacity is increased by integrated ventilation systems, electrical outlets, and gas pipes.

- **Restrooms:**

The Faculty of Medicine public restroom is clean and efficient, with a warm, monochromatic color palette that calms and neutralizes. Smooth, glossy ceramic tiles cover the walls and floors, making them attractive and easy to clean. Warm beige tiles create an inviting, practical atmosphere. Synthetic materials dominate the design for hygiene and durability. Polished surfaces make the bathroom look clean and brighten

it. Durable synthetic panels make the stalls and doors easy to clean and wear-resistant. Proper ventilation and cleanliness provide a tranquil, neutral atmosphere. Narrow and symmetrical, the restroom maximizes space and mobility. Medium-height ceilings make the space feel welcoming without becoming overbearing. Sinks and dispensers are ergonomically situated and constructed of polished materials for a modern design. The glossy reflecting surfaces diffuse light and show off the restroom's cleanliness.

- **Corridor:**

The Medical Faculty hallway is serene and functioning. The cool, monochromatic palette and light gray or off-white walls provide a clean, professional look. Durable, washable synthetic paint covers smooth wall surfaces. Polished tiles reduce glare and make the space look clean. With small dimensions and medium-height ceilings that balance space and intimacy, the hallway is practical and efficient. The corridor's regular and symmetrical layout match the architecture, providing organization and clarity. Soft odors from cleaning chemicals or the absence of harsh smells provide a neutral, comfortable environment for workers and kids. Synthetic flooring with a polished gloss and smooth texture makes cleaning easier. Matte ceilings reduce visual noise and complement shiny floors. This careful design creates a quiet, focused acoustic environment with low reverberation.

- **Staircase:**

With white walls and light beige stairs, the staircase is calm and homogeneous. This combination fosters focus and functionality in a peaceful, neutral setting. Durable and polished laminate or engineered stone is used to make the steps. Professional appearance and easy maintenance are guaranteed by the smooth surface. Smooth, matte synthetic paint on the walls reduces lighting glare and gives the room a soft, understated aspect. Placing polished steps against matte walls balances aesthetics and

utility. A sophisticated appearance and easy cleaning are provided by polished steps, while matte surfaces distribute light evenly to avoid harsh reflections. Reduced reverberation creates a peaceful, distraction-free space for attention and movement. Without strong odors, the olfactory environment is neutral and relaxing. Narrow stairs and medium-height ceilings provide an intimate but useful area. Its clean, symmetrical design emphasizes utility over adornment. Vertical stairs are useful for connecting building floors. Regular 3D geometry and matte-finished synthetic railings assure safety and durability. Adding railings and directional markings provides visual interest while keeping it simple. Large windows add natural light and openness. From clean materials and minimal chemical finishes, the mild, neutral smell gives users a fresh, pleasant experience.

Apendix I: Inventory Table of Medicine Faculty

Faculty of Medicine	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Identity: Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Identity: Material: Type: Natural	Material: Type: Synthetic	Identity: Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Identity: Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Identity: Dimension: Proportion: Long	Proportion: Short	Proportion: Wide	Proportion: Narrow	Dimension: Height: Low	Height: Medium	Height: High	Identity: Shape: Type: Regular	Type: Irregular	Shape: Symmetry: Symmetrical	Symmetry: Asymmetrical	Identity: Form: 3D Geometry: Regular	3D Geometry: Irregular	Form: Transformation: Additions	Transformation: Subtraction	Form: Orientation: Horizontal	Orientation: Vertical
	Class Room																																					
	Lecture Halls & Auditoriums																																					
	Laboratories																																					
	Public Restrooms																																					
	Corridors																																					
	Staircases																																					

Appendix J: Filling out the analysis Inventory Table of the Faculty of Pharmacy

- **Classrooms:**

The classroom at the Faculty of Pharmacy is quiet and well-organized to help students learn. A calm mood is created by soft white walls and a color scheme of only one color. The light wood and turquoise furniture breaks up the repetition and adds a touch of color. The smooth walls, desks, and seats make it easy to clean and give the room a professional look. Most of the walls and furniture are matte, which cuts down on the glare from overhead lights and makes it easier for students to see during classes. Desks and chairs in classrooms are made of strong polymers and designed wood to last and work well. The polished work tops and these materials make the space look both professional and stylish. A quiet, focused learning space with low reverberation and well-managed sounds. Ceiling panels and floor covers that block noise can help. Regular washing and synthetic materials give off a neutral, mild smell that helps staff and students concentrate. The classroom is calm because it is well-balanced. The open floor plan and medium-high roof make the space feel nice. The regular, symmetrical structure puts an emphasis on discipline and order. Simple, useful furniture and fixtures are lined up horizontally to make the space look organized and allow for clear sightlines. Large windows with blue curtains let in natural light, and electric lights above keep the room bright all the time. The simple design of the room's doors and storage bins, which may be made of synthetic materials, goes well with its clean look.

- **Auditoriums and Lecture Halls:**

The cold, one-color design has soft white walls that make the room feel bigger and brighter. Synthetic material finishes, like desks made of polished oak and chairs with deep purple padded seats, look classy and are still useful against this bland

background. The walls and floors of the hall are smooth and matte to cut down on glare and make it easier to see during long study sessions. This choice creates a focused and interesting environment by being practical and easy to use. The glossy, probably synthetic flooring adds to the sleek, modern look of the room. A quiet sound setting is made with materials that cut down on reverberation. A fresh, unnoticeable smell fills the space thanks to the clean, plastic surfaces and cool air conditioning. Long and wide, with a medium-high roof, the lecture hall is big enough to not be too crowded but small enough that people can talk to each other. The hall is regular and orderly in terms of its shape. The groups of chairs and desks that are symmetrical add to the sense of order and make better use of space. The simple design puts functionality first and keeps students and teachers from being distracted as much as possible. The room is perfect for learning because it is set up horizontally and has high-tech audiovisual equipment put carefully.

- **Laboratories:**

Cool, monochrome color scheme shows that the Faculty of Pharmacy laboratory values functionality and cleanliness. Light walls and surfaces brighten the area and provide a peaceful, professional environment. A laboratory needs a clean, hygienic appearance, and synthetic materials with polished finishes reflect light well. For sanitary reasons, laboratories need a glossy appearance that is easy to clean and maintain. Smooth worktops and cabinetry make cleaning easy and reduce dust. For durability and resistance to lab chemicals, synthetic polymers or reinforced laminates are utilized. The lab's acoustics are noisy due to experiments and equipment use. The mild odor shows that chemical scents are managed via ventilation systems, offering a safe and comfortable working environment for students and staff. The lab's long, wide dimensions and modest ceiling height allow easy movement and storage. This layout

improves user workflow and collaboration. Symmetrical and basic, the lab's design shows organization and procedure. Functionality and accessibility are enhanced by furniture and equipment's regular 3D shape and horizontal orientation. For frequent use, doors and cabinets may be built of moisture-resistant synthetic materials. Good lighting from windows and fixtures reduces eye strain during detailed tasks.

- **Restrooms:**

A chilly color group and monochrome color scheme make the Faculty of Pharmacy public restroom clean and clinical. Smooth, matte synthetic tiles make the walls sturdy and easy to clean. Public restrooms require thorough and frequent cleaning; thus, the smooth surface is practical for hygiene. Matte reflective surfaces reduce glare and calm the environment. Polished synthetic partitions and counters provide the restroom a professional look and increased moisture and wear resistance. Polished tiles on the flooring and walls mix functionality with elegance. Low reverberation creates a peaceful acoustic environment that improves privacy and lowers noise. No scents are noticeable in the restroom, likely due to proper ventilation and cleaning. The modest, symmetrical fixtures and dividers provide a relaxing ambiance. The room's modest ceiling height and small breadth make it useful and balanced vertically. The bathroom's uneven but symmetrical shapes add order. Functional features like mirrors, drains, and partitions create 3D geometry and transformation. The room's horizontal design maximizes floor area for practical use.

- **Corridor:**

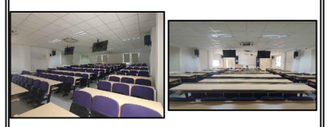
Cold and monochromatic colors provide a professional and relaxing atmosphere in the Faculty of Pharmacy corridors. Neutral walls and ceilings, usually white or light grey, reflect light and make the space appear larger and brighter. Smooth, polished synthetic floors are easy to clean and maintain, ensuring hygiene in this high-traffic area. Matte

surfaces reduce lighting glare, creating a visually pleasing setting. The polished floor is attractive and practical for heavy foot traffic. The corridor lockers and doors are made of synthetic materials for durability and regular use. The space's simple appearance is maintained with smooth, uniform doors. The corridor's low reverberation creates a tranquil academic environment. Neutral scents are expected in practical settings without strong or distracting odors. Good ventilation and non-porous materials prevent odor retention. Medium-height ceilings and a long, slightly narrow corridor create a balanced scale and space sense. The regular, symmetrical shape is basic and efficient, with simple complexity for navigation and functionality. Lockers and seats along the corridor's walls show its normal 3D geometry with additive modification. Space is mostly horizontal, emphasizing a linear approach for mobility and accessibility.

- **Staircase:**

The Faculty of Pharmacy stairway is monochrome and has light beige walls and steps. Combining functionality and aesthetics, this choice provides a friendly, neutral space. The smooth, matte walls reduce overhead lighting glare and improve safety by reducing distractions. The polished natural stone steps are durable and tidy. Polished stairs are easy to clean, maintaining hygiene in a busier area. Its low reverberation and quiet acoustics enable individuals move through the structure peacefully. The faint olfactory ambiance, possibly from routine cleaning agents, ensures a fresh and neutral aroma. Long and narrow stairs and medium-height ceilings provide a comfortable and useful space. The geometric staircase has asymmetry to give visual appeal without sacrificing simplicity. Brown wooden railings set off the lighter walls and steps, providing a unified but distinct look. This railing is smooth and matte for safety and touch. Its vertical arrangement makes climbing and descending the stairway easy.

Apendix J: Inventory Table of Pharmacy Faculty

Faculty of Pharmacy	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room			✓	✓				✓		✓			✓		✓	✓			✓			✓			✓		✓		✓		✓		✓		✓	
	Lecture Halls & Auditoriums			✓	✓				✓		✓			✓		✓	✓			✓	✓		✓			✓		✓		✓		✓		✓		✓	
	Laboratories			✓	✓				✓			✓		✓	✓			✓		✓	✓			✓			✓		✓		✓		✓		✓		✓	
	Public Restrooms			✓	✓				✓		✓			✓		✓	✓			✓		✓			✓		✓		✓		✓		✓		✓		✓	
	Corridors			✓	✓				✓		✓			✓		✓	✓			✓		✓		✓			✓		✓		✓		✓		✓		✓	
	Staircases				✓				✓		✓			✓		✓	✓			✓					✓		✓		✓		✓		✓		✓			✓

Appendix K: Filling out the analysis Inventory Table of the Faculty of Tourism

- **Classrooms:**

A warm, monochromatic color palette offers a relaxing learning environment at the Faculty of Tourism classroom. Smooth, matte walls reduce lighting glare and promote focus. Warm wall and furniture colors like light beige or cream provide a relaxing atmosphere. Durable and cost-effective synthetic materials like laminate for tables and chairs dominate the classroom. Polished surfaces look clean and are practical for daily usage. The smooth finish makes cleaning easier, keeping the space clean despite student activity. The correspondingly long classroom has medium-height ceilings that blend openness and attention. The room's symmetrical shapes and neatly positioned desks and chairs promote order and discipline. The horizontal furniture plan maximizes student learning by allowing them to see the board and teaching materials. Despite the flat surfaces' considerable reverberation potential, the area is calm. Careful material selection and design aspects that limit noise reflection may provide this acoustic control. A delicate olfactory ambiance from cleaning chemicals or air circulation systems increases the room's serene and hygienic atmosphere. The classroom has normal 3D geometry and useful elements like integrated storage or projection equipment that merge into the design.

- **Auditoriums and Lecture Halls:**

The Faculty of Tourism lecture hall is pleasant and well-designed with a warm, similar color palette. The harmonious beige, brown, and cream tones bring warmth and attention. With its warm color and ordered seating, this space is ideal for long study sessions and formal presentations. The lecture hall's smooth floor makes cleaning easy. Matte reflective quality reduces artificial lighting glare and improves visual comfort,

allowing attendees to focus on the lecture. It uses synthetic and natural materials, with synthetic materials in the seating and workstation areas for durability and natural materials like wood in decorative components and flooring for warmth and elegance. Their glossy finish balances usefulness and beauty. Durable polished wood and synthetic materials look professional and clean. Polished surfaces resist wear and tear, whereas matte surfaces avoid reflections that could distract lectures. Long and medium-ceilinged, the lecture hall balances openness and intimacy. It distributes sound and sightlines so that all participants can see the lecturer and presentation materials. The room's symmetry and regular shapes provide an academically disciplined environment. In the lecture hall, low reverberation and calm acoustics ensure clear speaker-audience contact. Use of sound-absorbing materials in walls and ceilings may have contributed to this acoustic quality. The scent from clean textiles and air conditioning may create a relaxing atmosphere. Regular 3D geometry and utilitarian elements like podiums, projection systems, and comfortable tiered seating define the lecture hall. Accessibility and usefulness are enhanced by integrating these features into the horizontal area.

- **Laboratories:**

Although efficient and utilitarian, the Faculty of Tourism laboratory's warm, monochromatic color scheme makes it pleasant. Beige, cream, and light brown are likely the main hues, which create a pleasant, cohesive atmosphere. These colors also relax and encourage focused work and experimentation. Smooth lab surfaces make them easier to clean and maintain, which is important in sterile conditions. Matte reflective quality lowers glare and provides a comfortable visual experience for users who must focus on complex work for long durations. The polished synthetic surfaces on workbenches, cabinetry, and floors provide durability, wear resistance, and a

professional, modern look despite the matte finish. The laboratory is built mostly of synthetic materials due to their longevity, chemical resistance, and ease of maintenance. Laminate countertops, vinyl flooring, and plastic or metal fittings are examples. In addition to looking clean, the polished finish protects surfaces from scratches and stains. Long labs provide considerable workspace and allow equipment and workstations to be uniformly dispersed for easy access. The medium-height room provides ample ventilation and illumination for a balanced and comfortable environment. A precision and discipline-focused lab needs order and organization, which the lab's symmetrical layout provides. Reverberation from hard surfaces and equipment makes the lab noisy. Such areas have considerable reverberation because utilitarian elements like polished counters and tiled flooring absorb minimal sound. However, effective ventilation systems neutralize chemical and cleaning agent aromas, keeping the olfactory atmosphere mild. Despite noise, the warm color palette, structured layout, and synthetic materials that convey cleanliness and professionalism provide a peaceful ambiance. The lab's 3D geometry is normal, with storage cabinets, sinks, and equipment smoothly blended into the horizontal orientation. The lab's design makes it practical and useful for instruction and experimentation by ensuring user mobility and accessibility.

- **Restrooms:**

In the Faculty of Tourism, the public restroom is constructed for functionality and aesthetics. A complimentary color palette of warm and cold tones gives a harmonious but dynamic look. Warm beige or white walls against cool blue or gray tiles create balance and brightness. The restroom looks better and feels cleaner with this combo. In such a busy region, smooth restroom surfaces are necessary for cleaning and maintenance. These matte reflective surfaces reduce glare, making visuals more

pleasant. Polished synthetic materials like tiled walls and floors or laminate counters withstand moisture, stains, and damage, keeping the restroom functional and attractive. Practicality makes synthetic materials dominate the space. The floors and walls may be ceramic or porcelain tiles, which are water-resistant and easy to clean. Laminate or high-density plastic countertops and dividers are likely stain- and damage-resistant. These surfaces are polished for longevity and a clean, modern look. The restroom is narrow, yet sinks, mirrors, and stalls are strategically placed to maximize space. Despite its small size, the medium height provides enough headroom to feel open and airy. Asymmetrical layout and irregular shape may be needed to satisfy structural constraints like walls or plumbing systems while still allowing users to move freely. Reverberation is modest in the restroom. Smooth, matte surfaces reflect sound but do not increase it. Proper ventilation systems preserve this peaceful ambiance and swiftly eliminate scents, creating a mild and pleasant olfactory environment. This mild aroma can be boosted with air fresheners or cleaners.

- **Corridor:**

The Faculty of Tourism corridor is efficient and simple while being visually coherent and peaceful. A balanced and appealing look is achieved using a chilly color group and monochromatic scheme. Contrasting elements like darker door frames or signs can lend depth to cold tones like light gray or pastel blue without overloading the senses. Smooth corridor surfaces make cleaning and maintenance easy. This style works well in high-traffic locations that must be clean. Matte reflective quality reduces overhead lighting and window glare, improving user visual comfort. Vinyl flooring and painted walls in the corridor are sturdy, cost-effective, and wear-resistant. They look modern and last longer with a polished finish. The corridor's layout accentuates its length, giving it openness and direction. Low ceilings might produce a sensation of

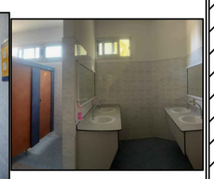
confinement, but the medium ceiling height balances the corridor's width. Doors, lockers, and signage are evenly spaced along the corridor, enhancing its order and simplicity. Although the corridor has considerable resonance, clever planning keeps it quiet. Smooth synthetic surfaces may reflect sound, but mats near doorways or sound-absorbing materials in adjacent rooms may reduce noise and calm the mood. Academic and professional contexts require this stillness to reduce distractions. A mild scent reflects the corridor's cleanliness and upkeep. The synthetic surfaces' cleaning solutions may give them a subtle fragrance that gives them a clean feeling. Space ventilation may also help preserve fresh air. Simple wall-mounted signage, doors, and lighting fixtures reinforce the corridor's horizontal orientation and uniform, symmetrical 3D geometry. The clean and simple design is not compromised by these parts' seamless integration. Though matte, the polished surfaces reflect light slightly, brightening and soothing the space.

- **Staircase:**

The Faculty of Tourism staircase is well-designed and simple, providing a peaceful and useful vertical transition between floors. Cold colors and a monochromatic scheme give a modern look. The staircase's calm, balanced, and clean mood is enhanced by the walls' light gray or white paint. Smooth surfaces make cleaning and maintenance easier. Matte reflective material lowers overhead lighting and window glare. This matte finish makes the staircase look softer than glossy finishes, making it more relaxing. The staircase has polished stone or terrazzo steps and synthetic handrails. These materials' polished finish adds a subtle gloss to the staircase and ensures endurance. The staircase is small to indicate its function as a transitional place. The middle floor height is comfortable and easy to move around. The regular contour of the steps and framework offers order and predictability, while the asymmetrical

layout—such as railings or landings—adds visual interest without complicating the design. Reverberation is low on the staircase. This stillness comes from polished surfaces and meticulous space layout. Natural and synthetic materials reflect sound but don't increase it, creating a quiet environment. Noise can interrupt academic and professional environments, therefore this is crucial. Cleaning agents or the staircase's stone or synthetic components may cause slight scents. These scents are not overbearing, giving a balanced and pleasant environment. With sleek, linear stairs and handrails, the staircase has regular 3D geometry. The vertical orientation matches its basic function of connecting levels, but the change adds railings, signage, and lights! The polished surface gives the railings a sophisticated, professional look while the synthetic materials provide safety and longevity.

Apendix K: Inventory Table of Tourism Faculty

Faculty of Tourism	Common Functions	Photos	Identity: Color: Color Group: Warm	Color: Color Group: Cold	Color: Color Scheme: Mono Chromatic	Color: Color Scheme: Analogous	Color: Color Scheme: Complementary	Color: Color Scheme: Achromatic	Texture: Surface Quality: Smooth	Texture: Surface Quality: Rough	Texture: Reflective Quality: Matte	Texture: Reflective Quality: Glossy	Material: Type: Natural	Material: Type: Synthetic	Sound: Reverberation: High	Sound: Reverberation: Low	Sound: Acoustic Ambiance: Quiet	Sound: Acoustic Ambiance: Noisy	Smell: Olfactory Ambiance: Strong	Smell: Olfactory Ambiance: Subtle	Dimension: Proportion: Long	Dimension: Proportion: Short	Dimension: Proportion: Wide	Dimension: Proportion: Narrow	Dimension: Height: Low	Dimension: Height: Medium	Dimension: Height: High	Shape: Type: Regular	Shape: Type: Irregular	Shape: Symmetry: Symmetrical	Shape: Symmetry: Asymmetrical	Form: 3D Geometry: Regular	Form: 3D Geometry: Irregular	Form: Transformation: Additions	Form: Transformation: Subtraction	Form: Orientation: Horizontal	Form: Orientation: Vertical
	Class Room																																					
	Lecture Halls & Auditoriums	 																																				
	Laboratories	 																																				
	Public Restrooms	 																																				
	Corridors	 																																				
	Staircases	 																																				

Apendix L: Findings of Case Study Table for Each Common Space

12 Faculties	Common Functions	Identity																					Identity														Identity					
		Color							Texture					Material			Sound				Smell		Dimension										Shape				Form					
		Color Group			Color Scheme				Surface Quality		Reflective Quality			Type			Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion							Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
		Warm	Cold	Both	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Both	Natural	Synthetic	Both	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Long-Narrow	Long-Wide	Short-Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
12 Faculties	Class Room	6	4	2	9	1	2	0	12	0	10	1	1	0	12	0	8	4	12	0	0	12	3	1	5	0	2	1	0	0	12	0	12	0	12	0	12	0	12	0	12	0

12 Faculties	Common Functions	Identity																					Identity														Identity					
		Color							Texture					Material			Sound				Smell		Dimension										Shape				Form					
		Color Group			Color Scheme				Surface Quality		Reflective Quality			Type			Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion							Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
		Warm	Cold	Both	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Both	Natural	Synthetic	Both	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Long-Narrow	Long-Wide	Short-Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
12 Faculties	Lecture Halls	5	5	2	9	1	2	0	12	0	11	0	1	0	10	2	6	6	11	1	0	12	1	0	4	0	0	7	0	0	12	0	9	3	12	0	10	2	12	0	12	0

12 Faculties	Common Functions	Identity																					Identity														Identity					
		Color							Texture					Material			Sound				Smell		Dimension										Shape				Form					
		Color Group			Color Scheme				Surface Quality		Reflective Quality			Type			Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion							Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
		Warm	Cold	Both	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Both	Natural	Synthetic	Both	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Long-Narrow	Long-Wide	Short-Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
12 Faculties	Labs	5	7	0	12	0	0	0	12	0	10	1	1	0	10	2	11	1	0	12	0	12	4	0	4	0	0	4	0	0	12	0	10	2	11	1	10	2	12	0	12	0

Apendix L: Findings of Case Study Table for Each Common Space

12 Faculties	Common Functions	Identity												Identity																Identity												
		Color							Texture					Material			Sound				Smell		Dimension										Shape				Form					
		Color Group			Color Scheme				Surface Quality		Reflective Quality			Type			Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion							Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
		Warm	Cold	Both	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Both	Natural	Synthetic	Both	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Long-Narrow	Long-Wide	Short-Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
	Public Restroom	2	8	2	10	0	2	0	12	0	11	1	0	0	11	1	9	3	9	3	1	11	2	1	1	5	2	1	0	0	12	0	9	3	7	5	9	3	12	0	12	0

12 Faculties	Common Functions	Identity												Identity																Identity												
		Color							Texture					Material			Sound				Smell		Dimension										Shape				Form					
		Color Group			Color Scheme				Surface Quality		Reflective Quality			Type			Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion							Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
		Warm	Cold	Both	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Both	Natural	Synthetic	Both	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Long-Narrow	Long-Wide	Short-Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
	Corridors	1	10	1	11	0	1	0	12	0	9	2	1	0	11	1	9	3	11	1	0	12	3	0	0	1	7	0	1	0	12	0	10	1	9	3	10	2	12	0	10	2

12 Faculties	Common Functions	Identity												Identity																Identity												
		Color							Texture					Material			Sound				Smell		Dimension										Shape				Form					
		Color Group			Color Scheme				Surface Quality		Reflective Quality			Type			Reverberation		Acoustic Ambiance		Olfactory Ambiance		Proportion							Height			Type		Symmetry		3D Geometry		Transformation		Orientation	
		Warm	Cold	Both	Mono Chromatic	Analogous	Complementary	Achromatic	Smooth	Rough	Matte	Glossy	Both	Natural	Synthetic	Both	High	Low	Quiet	Noisy	Strong	Subtle	Long	Short	Wide	Narrow	Long-Narrow	Long-Wide	Short-Narrow	Low	Medium	High	Regular	Irregular	Symmetrical	Asymmetrical	Regular	Irregular	Additions	Subtraction	Horizontal	Vertical
	Stair Cases	3	9	0	11	1	0	0	12	0	9	1	2	4	3	5	6	6	12	0	0	12	0	0	1	7	1	1	0	0	12	0	12	0	4	8	10	2	12	0	0	12