

THE PIONEER COURSE IN COLOUR STUDY AND DESIGN AT THE FACULTY OF ARCHITECTURE, CHULALONGKORN UNIVERSITY

Assoc. Prof. Piyanan Prasarnrakit

50/929 Soi C9, Moo 6 Bond Street, Baanmai, Pakkret, Nonthaburi, Thailand

Keywords: colour, colour study, colour design, education

ABSTRACT

The pioneer course in colour study and design at the Faculty of Architecture, Chulalongkorn University was originated from the fact that colour design and study was only a small part of Design Fundamental module, which was not able to provide the Architecture students enough fundamental knowledge about colours. The pioneer colour study and design was thus established in 2005 as an elective course. The aim of the course is to provide students with solid fundamental knowledge about colour usage in terms of functional and aesthetical senses. The students should also understand changes and gimmicks, which could help creatively design colours that serve functions. The course employs the interdisciplinary concept, which combines Science with Arts and Sociology. Its structure is built up from scientific facts regarding colour perception namely colour seeing, colour interpretation, combined with aesthetics knowledge regarding colour harmony and contrast. After completing the course, the students are able to integrate knowledge attained by the “learning by seeing, touching, feeling and creating good colour design” method as well as able to show good progress in applying the theory into colour design concept creation in a short period of time. They also show interests in colour design and use colours in designing architectures. The success of this course also reflects in the number of students enrolled, from 15 students in 2005 to 52 in 2012, which proves the increase interests in colour among students.

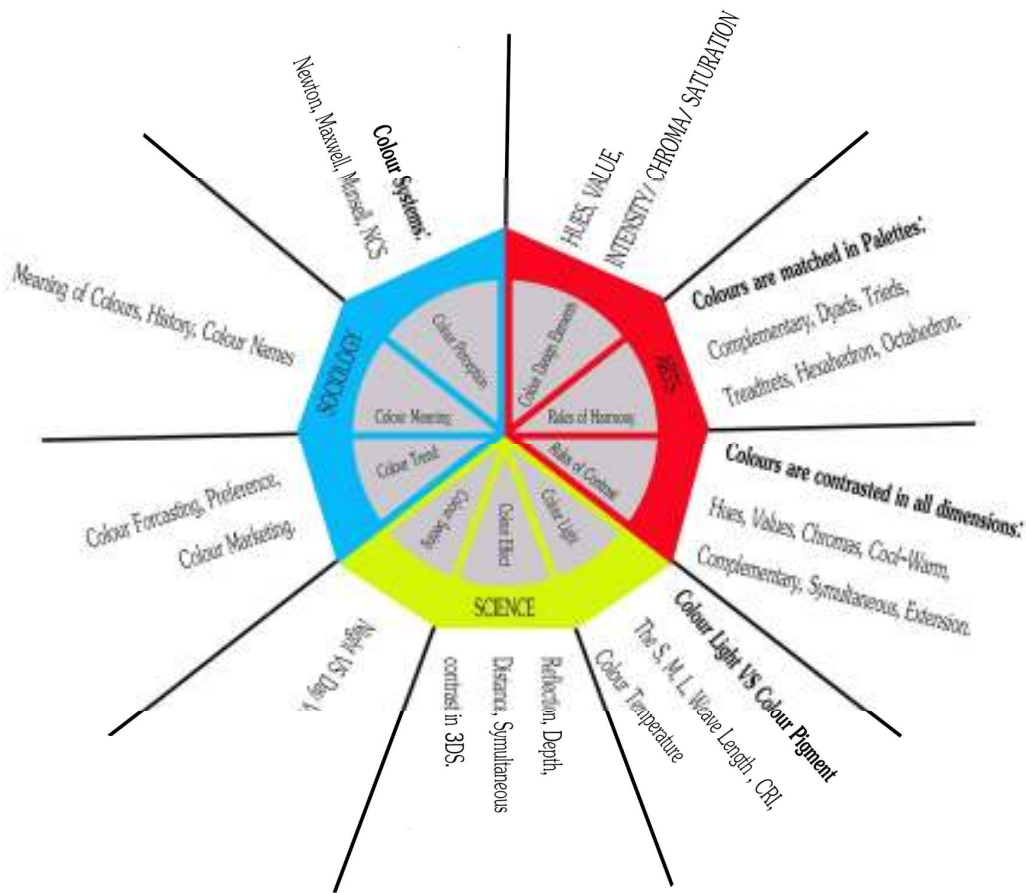
INTRODUCTION

The Colour Study and Design course is the first course at the Faculty of Architecture, Chulalongkorn University that dedicates the full course teaching about “colours”. Rather than conventionally regarding colours as one of the less important design elements, this course aims at demonstrating how important colours are in designs and the impacts of the colours on designs that are beyond aesthetical impact.

To demonstrate the point, the class teaching method was to unconventionally argue that the knowledge about colours does not belong purely to the Arts. Rather, the knowledge about colours is the Arts, Science and Sociology combined.

The course, thus, provided the students with colour knowledge on three aspects. Firstly, the course continued to explore the Arts aspect of colours by continuing to teach about fundamental theory about colour scheme in order to create mood and feeling which matches with design objectives.

Knowledge about Arts applied in colour studies, thus, concerns Harmony and Contrast, focusing on aesthetical sense. Secondly, the course took the students to explore colours scientifically. Colour Study and Design is the pioneer course that aware of the scientific consequences from the use of colours. For example, the course explored the change of colours in different light, different environment and different seeing ability. This is considered the study of Science which contributes to better understanding of colour usage. Lastly, the Colour Study and Design took the Sociology approach by exploring human feelings through the study of colour system organisation, colour awareness, trends and colour meanings.



In exploring the the Arts, Sceince and Sociology aspects of colours, the course was structured by alternatively performing lecture topics and studio practices which were a 3-4 hour-individual task. As Colour Study and Design was an elective subject for 4th and 5th year architectures students who had somewhat good background knowledge about architecture in various natures, which was their major subject, the focus of the course was on “designing colours” rather than on designing structure or form.

Students were taught by the “Learning by Seeing” approach. They would learn to mix colours by themselves and learn about the change of hues and nuances.

The lectures and assignments given in this course start from a simple task to more complicated ones. The first lectures and assignments were dedicated to colour palette introduction. Topping up from the fundamental 12 colour palette studied in their first year, students learned about 40 colour palette in Natural Colour System (NCS) which can be mixed and create many nuances. The aim was to provide the students with the opportunity to experience the more complicated colour palette and be able to use it to create more complicated colour designs.

After the first three weeks when students were familiar with the hues and nuances, the course proposed the first studio practice—a design project, encouraging the students to design colours, based on colour theory, colour harmony and colour contrast. From the seeing practice through the first projects, the course then proceeded to the more complicated design projects. The students would learn about colour & meaning and colour perception for each colour and group of colours. They were assigned to design colours for the design project of their choice, such as colour renovation that portrayed identity suited with functions and reflected beauty. The work were assigned be done both in 2Ds and 3 Ds.

In terms of lighting, the course provided knowledge about colour pigment and colour light by considering from the appeared wavelength, which is a basic theory but provides effects for the students to analyse before choosing colours.

Moreover, the students learned about effects which enable design’s colour changing, for example, reflection, simultaneous contrast both on 2Ds and 3Ds. These effects would be learnt while the students explored colours on their design projects. For the design projects that required the decision from more than one person, those projects would be assigned as group projects such as “Painted by Reflection” project, the project initiated by the instructor which provided students the opportunity to witness colour changing by different kinds of colour reflection.

In terms of 2Ds colour design, the students were required to use knowledge gained from colour perception and colour effect lectures in creating colour story board. Other design elements were reduced such as details of forms, structural lines so as to demonstrate the impact of colours on story-telling. After the story board has been critiqued and developed to a certain point, the students were then allowed to design 3Ds works. Through designing the 3Ds works, the students’ ability and precision in choosing colours that creates beauty, function and at the same time, expresses feelings and communicates sizes and distance were shown.

The last assignment was the final project, which was subjected to each student or each group of students’ interest. The students were required to choose their topics of study and design colours for the topics. The project would be presented in every process, from methodology, theories applied, analysis and synthesis.

The final project was the indicator of students’ interests. The topics chosen varied from colours for food display, packaging and dessert colour design, colours for nail liquor, lighting and colour design for restaurant, colour changing for hard scape to separate daytime and nighttime activities, colour design for MRT station to colours with other senses (Synesthesia) such as CD cover design for jazz music and packaging design that convey the taste of the food etc. Each project showed the students’ understanding and ability in combining and applying the Arts, Science and Sociology aspects of colours.

In terms of course assessment, the assessment of the course is part of the motivation for students to excel colour design as for every project, should the students be unsatisfied with the work or grades, the students are encouraged to resubmit the project as many times as they wish until the end of the course. The records show that more than 50 per cent of the students resubmitted the works which encouraged them to learn from the mistakes and to make better understanding with each colour topic.

The practices from 9 projects during the first weeks to the 13th week enabled the students to design colours with confidence and to apply knowledge to their final projects in only three weeks. For each assignment, the limited amount of time encouraged the students to pull their resources quickly. Especially the final projects, they demonstrated very well that the students had good understanding and were able to integrate and apply the Arts, Science and Sociology aspects of colours into their works.

BIBLIOGRAPHY

- Tracy, D. & Cassidy, T. (2005). *Colour Forecasting*. Oxford, Blackwell Publishing Ltd., Leatrice, E. (2000). *Pantone: Guide to Communicating with Color*. Cincinnati, Grafix Press, Limited.
- Houston, J. (2007). *Optic Nurve: Perceptual Art of the 1960s*. London, Merrell Publishers Limited.
- Itten, J. (1973). *The Art of Color*. New York, Van Nostrand Reinhold Company.
- Livingstone, M. (2002). *Vision and Art: The Biology of Seeing*. New York, Harry N. Abrams, Inc.
- Lewis, G. (2009). *2000 Colour Combinations for Graphic, Textile and Craft Designers*. London, Batsford.
- McCandless, D. (2009). *Information is Beautiful*. London, Collins.
- Prasarnrajkit, P. (1992). *Colour Theory in Interior Design*. Bangkok, Preigwaan Graphic Co., Limited.
- Scandinavian Colour Institute AB. (1996). *NCS Color Atlas' 96*. Stockholm, Sweden.
- Swirmoff, L. (2009). *Dimensional Color*, 2nd ed. London, Collins.
- Temkin, A. (2008). *Color Chart: Reinventing Color, 1950 to Today*. New York, The Museum of Modern Art.
- Zwimpfer, M. (1988). *Color Light Sight Sense: An Elementary theory of Color in Pictures*. West Chester, Schiffer Publishing Ltd.