

## 國立台灣科技大學 114學年 第2學期 課程大綱

## Spring 2026 NTUST Course Outline

授課教師：歐立成

Instructor:Li-Chen Ou

課程名稱：應用色彩心理學

Course Title : Applied Color Psychology

2026/6/22

課程代號： CI5337701 Course Code 學分數： 3 Credits	必選修：選修/半學年 Required/Elective:Elective/Half Yr. 先修課程： Prerequisites
節次教室： R6(TR-617) R7(TR-617) R8(TR-617) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website <a href="https://sites.google.com/view/color-psychophysics-en/courses/applied-psychology">https://sites.google.com/view/color-psychophysics-en/courses/applied-psychology</a>	
課程宗旨： Course Objectives	透過本課程的學習，同學們將進一步掌握色彩科學與色彩心理學的研究現況，並瞭解如何在色彩設計中應用人類對色彩的心理反應。課程中將深入探討人因實驗方法與實驗設計，並經由分組專題實作，使同學們具備人因實驗設計規劃與數據分析的能力。 After taking this course, students will be able to understand recent developments of research in colour science and colour psychology, and how to apply psychophysical findings in colour design practices. In this course we will discuss issues frequently encountered in a psychophysical study including research methods and experimental design. During the course, students will be divided into subgroups for conducting small research projects, in order for students to develop essential concepts and tools in experimental design and data analysis in colour psychology.
課程大綱： Outline of Lectures	<ol style="list-style-type: none"> <li>1. 色彩科學的研究現況。</li> <li>2. 色彩心理學的研究現況。</li> <li>3. 對立色理論與獨特色相。</li> <li>4. 認知色與色彩情感。</li> <li>5. 色彩與視覺舒適度。</li> <li>6. 色彩知覺與個體差異現象。</li> <li>7. 色外貌與同色異譜現象。</li> <li>8. 心理物理學模型的推導與檢測。</li> <li>9. 色彩特性化實作。</li> <li>10. 人因實驗設計。</li> <li>11. 分組專題實作。</li> </ol> <ol style="list-style-type: none"> <li>1. Recent developments of colour science studies.</li> <li>2. Recent developments of colour psychology studies.</li> <li>3. Opponent colour theory and unique hues.</li> <li>4. Cognitive colour and colour emotion.</li> <li>5. Colour on visual comfort.</li> <li>6. Colour perception and issues of individual difference.</li> <li>7. Colour appearance and issues of metamerism.</li> <li>8. Psychophysical model development and the validity test.</li> <li>9. Step-by-step practice in colour characterisation for displays.</li> <li>10. Experimental design for psychophysical research.</li> <li>11. Group research projects.</li> </ol>
講授 Lecture：50%	
分組討論 Group discussion：20%	

授課方式： Method of Instruction	案例研討 Case study : 0%  操做練習 Practical exercises : 30%  講授 Lecture : %
教科書： Textbooks	Elliot, A., Fairchild, M., & Franklin, A. (Eds.), Handbook of Color Psychology. Cambridge University Press (2015). ISBN: 978-1107043237.
參考書目： References	Hunt, R. W. G. and Pointer, M. R., Measuring Colour, 4th Edition (2011). Wiley. ISBN: 978-1119975373.
修課須知： Notice	
評量方式： Grading	1. 課堂表現。 2. 專題實作。  1. In-class performance. 2. Research project.
備註說明： Notes	1. 本課程為 EMI 課程（英語授課）。 2. 修課同學須熟悉 Microsoft Excel 運算操作。 3. 修課同學須自備筆電。  1. This is an English-taught course. 1. Students are required to be able to perform calculations using Excel functions. 2. Students are required to bring their own laptops to the class.