以證據為基礎的設計思考
Evidence-Based Design Thinking

課號: 11220IPTH101400

任課教師 (Instructor)：常善媚 (Shan-Mei Chang)

上課時間：T 7, 8, 9 (星期二下午 7, 8, 9 節)

學分數：3 學分 (通識學分: 社會科學領域-社會、心理、人類、教育、性別研究類)

課程概述 (Course Description)

本課程為大一創意探索課程。目標帶領學生從在地社會議題出發，完成設計思考之需求探索活動與計劃書提案訓練。本學期課程將選定永續發展目標(SDGs)中的「兒童健康福祉(SDG3)」、「偏鄉教育(SDG4)」為主題，引導不同專長之學生團隊以設計思考為工具，並練習於學術研究、田野觀察、與自我經驗之間尋找證據，進行需求洞察與創意發想提案，培育具領導力與創新力的學生團隊。

The course is a part of creativity exploration courses for freshman and aims to take students to start from local social issues and finish exploration activities design thinking requires and proposal training. We will choose items from Sustainable Development Goals (SDGs), Child Welfare and Rural Education, and lead students with different expertise to apply design thinking and practice finding evidence in academic research, field observation and personal experiences. Also, this course will train students to find needs and make a proposal with creativity while cultivating student groups with leadership and innovation.

教學目標 (Course Objectives)

1. 了解設計思考的歷史緣由與主要概念

2. 運用設計思考進行有興趣的目標對象的探索與同理

3. 了解不同證據的區別與來源

4. 能正確運用不同來源的證據進行三角檢證與思辯

5. 能倚賴現有證據進行設計思考與問題解決

6. 能蒐集並運用證據進行創意發想待解決的問題

By the end of this course, the students will be able to：

1. Understand the historical origin and main concepts of design thinking

2. Apply design thinking to explore and empathize with the interested target objects

3. Learn to track the origins of different evidence and distinguish between them

4. Use triangulation and speculation based on evidence with different origins

5. Conduct design thinking and problem solution based on existing evidence

6. Collect evidence and come up creatively with solutions based on it

關鍵字 (Course keywords)

設計思考(design thinking)、證據為基礎 (Evidence-Based)、創意 (innovation)、問題解決 (problem solving)、健康福祉 (good health and wellbeing)、優質教育 (quality education)

此科目對應之系所課程規畫所欲培養之核心能力(Core capability to be cultivated by this course)

創新與領導能力（To innovate and lead）
跨領域能力（To cross disciplinary boundaries）
生活實踐能力（To practice）
社會變遷因應能力（To adapt to social change）
慎思明辨能力（To think critically）

課程要求與成績考核：

1. 課堂參與（出席與投入） 30%：包含六篇反思心得、出席情形、上課投入情形、每周目標執行進度作業

2. 小組討論 15%

3. 口頭報告與書面報告 50%：包含期中口頭報告 20%、期末口頭與書面報告 30%

1. Attendance, participation, and reflation   30%

2. Group discussion and participation   15%

3. Oral Report and Final paper   50%

參考資料

1. 劉世南(2021)。設計思考課程教材 (Design thinking toolkit)。出版機關：衛生福利部國民健康署。

2. 宋世祥 (2016)。百工裡的人類學家：帶你挖掘「厚數據」，以人類學之眼洞悉人性，引領社會創新，台北：果力文化。

3. 宋世祥 (2020)。百工裡的人類學家 2 厚數據的創新課：5 大洞察心法╳6 種視覺化工具，掌握人類學家式的系統思考，精準切入使用者情境，台北：果力文化。

4. Boydell, K. M., Honey, A., Glover, H., Gill, K., Tooth, B., Coniglio, F., ... & Scanlan, J. N. (2021). Making lived-experience research accessible: A design thinking approach to co-creating knowledge translation resources based on evidence. *International Journal of Environmental Research and Public Health, 18*(17), 9250. https://doi.org/10.3390/ijerph18179250

5. Howard, Z., & Davis, K. (2011). From solving puzzles to designing solutions: integrating design thinking into evidence based practice. *Evidence Based Library and Information Practice, 6 (4)*, 15-21.

課程大綱 (Syllabus)

周次	課程主題	必讀書目	作業
2/20	甚麼是設計思考？ Introduction to design thinking (heterogeneous grouping)		
2/27	以人為中心的設計（human-centered design）： 需求性(Desirability) 可行性(Feasibility) 發展性(Viability)	Chapter 1	心得 1
3/5	場域需求的探索，確定興趣的方向 Exploring the needs of field and confirming the interested directions	Boydell et al. (2021)	心得 2
3/12	建構正確的問題：同理心地圖 Construction of correct problems: Empathy map	Chapter 2	心得 3
3/19	問題定義 Defining the problem	Chapter 3	心得 4
3/26	人物採訪與問題設計 Interview and problem design	Chapter 4	訪談大綱草稿
4/2	現象裡的「人」：冰山與同理心訓練 Human in the phenomenon: iceberg theory and empathy training		心得 5
4/9	習以不為常，理所不當然的參與觀察 Take nothing for granted: Participant observation	Howard & Davis (2011)	心得 6
4/16	期中報告：每組報告定義需求擬定初步解方 Midterm presentation: present the definition of needs and come up with a primary solution		期中口頭報告
4/23	以人為本的好設計、好服務、好生意 People oriented design, service and business		
4/30	厚數據與三角檢證		

	Thick data and triangulation		
5/7	發想：創意發想與雛型設計 Brainstorm: creative thinking and prototype design	Chapter 5	
5/14	研究中的「人」：證據的搜尋與思辯比較 Human in the research: evidence search and critical thinking		
5/21	利害關係人分析 Stakeholder analysis		
5/28	產品/服務/設計創新演練 (方案測試與迭代修正 1) Presentation of in-process projects		
6/4	產品/服務/設計創新演練 (方案測試與迭代修正 2) Presentation of in-process projects		
6/11	成果報告製作與討論 Reports making and discussion		
6/18	期末報告與成果發表 Final presentation		期末口頭報告 (含海報一份) 與書面報告

發想：創意發想與雛型設計
Brainstorm: creative thinking and prototype design

研究中的「人」：證據的搜尋與思辯比較
Human in the research: evidence search and critical thinking